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MANAGEMENT COMPACTS ON LOW-LEVEL RADIOACTIVE WASTE

HEARING

BEFORE THE

COMMITTEE ON THE JUDICIARY
UNITED STATES SENATE

NINETY-NINTH CONGRESS

FIRST SESSION

ON

S. 44, S. 356, and S. 442

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MANAGEMENT COMPACTS ON LOW-LEVEL RADIOACTIVE WASTE

FRIDAY, MARCH 8, 1985

U.S. Senate,
Committee on the Judiciary,
Washington, DC.

The committee met, pursuant to notice, at 10 a.m., in room SD-226, Dirksen Senate Office Building, Hon. Strom Thurmond (chairman of the committee) presiding.

Also present: Senators Simpson and McConnell.

Staff present: Pete Kulmala, counsel.

OPENING STATEMENT OF CHAIRMAN STROM THURMOND

The Chairman. The committee will come to order.

I am pleased to welcome everyone to the Senate Judiciary Committee hearing today on S. 44, S. 356, and S. 442, bills to grant the consent of Congress to low-level radioactive waste management compacts for the southeast, northwest, and Rocky Mountain regions. Passage of these bills, as well as other compacts yet to be introduced, is an essential step toward final implementation of the regional disposal system approved by Congress in the form of the Low-Level Radioactive Waste Policy Act of 1980.

With this hearing today, the Judiciary Committee resumes its consideration of this important issue. In the 98th Congress, the committee held several hearings on this matter, but regrettably, was not able to act on the four compacts before the committee. I am determined as chairman of this committee to do everything possible to achieve approval of these compacts by the committee and by the Congress this year. Time is fast running out, and there is no preferred alternative.

As most of you know, the burden for disposal of commercially generated low-level radioactive waste is currently borne by only three States: South Carolina, Washington, and Nevada. It is essential and in the interest of fairness, that Congress consent to the several pending low-level waste management compacts, so that this burden for disposal of these materials will be more equitably distributed in accordance with the 1980 Policy Act.

Notwithstanding the policy expressed in that law, movement toward regional disposal has been extremely slow. On top of the delays brought about by inaction among many of the States, the consent process has been frustrated by opposition from States and regions which do not now have disposal sites.

As a Senator from one of the sited States, and as chairman of the Committee on the Judiciary, I am committed to the full implementation of the 1980 Low-Level Radioactive Waste Policy Act. There are several important questions, as well as one major obstacle, which must be overcome in order to give full effect to the regional system envisioned in the 1980 Policy Act.

In this hearing, the committee will address these issues, with such reference to the concepts advanced by Congressman Udall in H.R. 1083 as the witnesses may deem appropriate, as well as other suggestions they may have for resolution of this deadlock.

I would note that the House Interior Committee, Subcommittee on Energy and Environment, chaired by Congressman Udall is also continuing hearings on this issue today. Yesterday I had the opportunity to appear before the committee, and I ask unanimous consent that a copy of my testimony be printed in the record at this point. If there is no objection, that will be done.

[Statement follows:]

PREPARED STATEMENT OF SENATOR STROM THURMOND BEFORE THE HOUSE COMMITTEE ON INTERIOR AND INSULAR AFFAIRS, MARCH 7, 1985

Mr. Chairman, I would like to thank you for inviting me to appear before you and the distinguished members of the House Committee on Interior and Insular Affairs to testify on the important subject of low-level radioactive waste disposal. You are to be commended for your persistence and dedication to the resolution of this issue of great significance to our entire Country. As the members of this Committee well know, we are fast approaching a date which may be either a threshold for a few, fairer and more efficient system of waste disposal, or a dead-end on the course which we now travel, with serious adverse consequences surely to follow. Therefore, in my judgment, the task force before Congress is clear. It is essential that we grant consent to the several pending regional low-level waste management compacts, so that the burden for the disposal of this low-level nuclear waste will be lifted from the three currently sited states and spread more equitably over all the compact regions.

Notwithstanding the policy expressed in the Low-Level Radioactive Waste Policy Act of 1980, movement toward regional disposal thus far, has been extremely slow. I am disappointed that none of the compacts introduced during the 98th Congress were even able to clear the committee level. On top of the delays brought about by inaction among the states, the consent process was bogged down by opposition from non-sited states and regions.

Mr. Chairman, as you know, there are several obstacles, including at least one major troublesome issue, which must be overcome if regional system is ever going to become operational. The biggest problem, of course, continues to be access to the three existing disposal facilities for states outside the boundaries of the sited regions after the January 1, 1986, exclusionary date. I am encouraged, however, by the flurry of activity associated with low-level waste both here in Washington, and across the Country. The discussions about possible formulas and for addressing the post-1986 access issue have been generally positive and helpful.

Mr. Chairman, the message (H.R. 1083) which you have sponsored and which is the subject of today's hearing is a very constructive proposal which would provide for a transition from our current system of disposal to that contemplated in the 1980 Policy Act. While I am not prepared to endorse the specific mandates of this bill, I congratulate you, Chairman Udall, for bringing forth this vehicle for discussion. Cast as an amendment to the Low-Level Radioactive Waste Policy Act of 1980, this measure would assure currently non-sited regions of disposal access while other facilities are developed and brought on-line. It would also limit the volume of out-of-region waste being disposed on in South Carolina, Washington, and Nevada, and allow these states to collect surcharges on such waste. The right to exclude out-of-region waste after January 1, 1986 would remain intact, but subject to the offer of individual agreements by currently sited states.

Mr. Chairman, I think this bill is a step in the right direction. The concept of a transition period seems to be required, in view of the short time remaining before January 1, 1986, and the virtual impossibility of preparing and new site for operation by that date. I strongly believe, however, that the decision as to what may be an acceptable form of transition must be made by the states. When the Policy Act was passed in 1980, Congress expressly reserved to the states the responsibility for disposal of low-level waste. Under the law, the states have the right and the duty to determine how to best handle this matter.

Mr. Chairman, as a Senator representing South Carolina, I wish to emphasize the situation currently facing my State. As you know, the Chem-Nuclear facility near Barnwell now handles approximately forty-five percent of our entire Nation's commercially generated waste. The facility in the state of Washington handles a comparable volume and the site in Nevada takes the remainder. Nuclear waste generators continue to produce low-level waste at rates which are increasing by approximately 5% each year, and ultimately rely on only these three states for the disposal of these materials. This is blatantly unfair, contrary to the policy articulated by Congress in the 1980 Act, and cannot continue. In fact, state officials and some people in South Carolina are so concerned about the gross inequities of the current situation, that steps are being taken in the State General Assembly to close the Barnwell site on January 1, 1986, if the Southeast Compact is not approved.

Mr. Chairman, I do not want to be misunderstood. South Carolina officials, and those representing the other sited states, have been more than willing to sit down with officials from non-sited states in a good faith effort to find a reasonable solution to this dilemma. Such discussions have been going on for some time under the auspices of the National Governors' Association and in other contexts. I am hopeful that those discussions, as well as Congressional hearings, may result in a formula which will facilitate quick Congressional consent to the compacts.

I would like to emphasize, however, that the states are the central figures in this process, since the disposal of low-level waste is a state responsibility. Accordingly, I would oppose a Federally-mandated transition period, unless it has the support and concurrence of the states involved. Any other approach would be an unwarranted intrusion into an area clearly reserved to the states.

Mr. Chairman, because time is of the essence in resolving this issue, it is especially helpful to have before Congress the bill which you have introduced. As this Committee proceeds with these hearings today and tomorrow, and as the Senate Judiciary Committee holds further hearings on this issue tomorrow, I am very hopeful that an acceptable consensus will emerge, so that all states will shoulder their fair share of this waste disposal responsibility.

Thank you, Mr. Chairman, for according me that opportunity to address this very important issue. I look forward to working with you, the other members of this Committee, and other House members to gain approval for these compacts in this session of Congress.

The CHAIRMAN. Before we begin with our first witness, I wish to place into the record copies of S. 44, S. 356, and S. 442, along with statements of Senators Slade Gorton and Ernest Hollings.

[Aforementioned follows:]

PREPARED STATEMENT OF U.S. SENATOR SLADE GORTON

Mr. Chairman, members of the Committee, I appreciate this opportunity to testify on regional low-level radioactive waste management, and I commend the Committee for initiating hearings on this important issue.

As you know, I am the prime sponsor of S. 356, a bill granting consent of Congress to the Northwest Interstate Compact on Low-Level Radioactive Waste Management. I have as cosponsors Senators Hatfield, Hatch, Murkowski, Johnston, Matsunaga, Baucus, Inouye, Garn, McClure, Stevens, Symms, Evans, and Packwood.

The state of Washington has cooperated in dealing with the national problem of low-level radioactive waste disposal in an exemplary fashion. In 1981 Washington State, in conjunction with other Northwest States, established the first compact in the nation. While waiting for Congress to ratify the Northwest Compact, Washington State has continued to accept for disposal over 50 percent of the low-level radioactive waste produced in the United States, although Washington itself generates only 3 percent of the nation's waste. In addition, Washington State has been participating in the ongoing National Governors Association negotiations on proposed amendments to the Low-Level Radioactive Waste Policy Act of 1980.

The state of Washington has been reasonable and patient long enough. It is time for Congress to approve the Northwest region's efforts to comply with the Low-Level Radioactive Waste Policy Act of 1980 and ensure that responsibility for regionally-generated low-level radioactive waste becomes a reality.

Washington State cannot and will not continue to accept the majority of the nation's waste. I firmly support Governor Gardner in his commitment to reducing the volume of wastes coming to the Hanford Nuclear Reservation in the State of Washington. Although Washington State is willing to consider some level of continued access to its disposal site for out-of-region generators after 1986, any changes to the 1980 Act must go hand-in-hand with ratification of regional compacts and a substantial reduction in the volumes of the wastes coming to Washington.

I urge the Committee to take prompt action on the Northwest Compact, as well as other regional compacts pending before it, and ensure that all states accept their responsibility to share the burden of low-level radioactive waste disposal.

PREPARED STATEMENT OF SENATOR ERNEST HOLLINGS

Mr. Chairman and Members of the Committee, I regret that this morning's executive session of the Commerce Committee prevents me from appearing before you in person, but I do want to go on record regarding the importance of legislation to give Congressional consent to the proposed interstate compacts.

Mr. Chairman, you and I and many of our colleagues have worked hard over the last few years to find an equitable and safe way to handle the Nation's commercial low-level radioactive waste. I thought we had found that solution in the Low-Level Radioactive Waste Policy Act of 1980. The Act is based on a simple, unassailable premise: each state is responsible for handling its own low-level refuse. States may form interstate compacts if they wish; and by January 1, 1986, any region with an approved compact no longer need take out-of-region waste. The Act was fair and straightforward. And it put every state on notice that it had until 1986 to devise a method for handling its own waste.

I cannot tell you how angry I am that some states have ignored the 1980 law and made no effort to live up to their responsibilities under it. Now these states want their representatives in Congress to block approval of our Southeast, Northwest, and Rocky Mountain Compacts. These states want those of us with burial sites to keep taking their garbage because they don't have the political courage to build their own facilities. Not surprisingly, the citizens and officials of our state are furious at this attempt to break the bargain Congress made in 1980 with South Carolina, Washington State, and Nevada.

South Carolinians are open to truly reasonable proposals to resolve this stalemate. But I haven't seen any from the states in question. So, once again, it is South Carolina and particularly our Governor who will go the extra mile and see if some acceptable solution can be found to this political deadlock. Today Governor Riley once again will offer to discuss details with these states. I commend him for the leadership he has shown in the past and the leadership he shows again today.

However, let no one mistake our intentions. We are willing to talk. But the Governor and the entire South Carolina Congressional delegation are unanimous in saying that we will shut our low-level waste facility if we do not get our Southeast Compact approved on grounds acceptable to us. Legislation has been introduced in the State legislature to do precisely that. Closing the Barnwell facility would cause pain in our State and the rest of the Southeast. But continuing to take all the nuclear garbage generated by other states is simply unacceptable to us. I hope that every governor and every member of Congress understands that.

Mr. Chairman, I commend both you and the Governor for your valuable work on the nuclear waste issue. I look forward to working with you and our colleagues to see if some acceptable solution can be found to this increasingly urgent problem.

II

99TH CONGRESS
1ST SESSION

S. 44

To grant the consent of the Congress of the Southeast Interstate Low-Level Radioactive Waste Management Compact.

IN THE SENATE OF THE UNITED STATES

JANUARY 3, 1985

Mr. THURMOND (for himself, Mr. HOLLINGS, Mr. HELMS, Mr. EAST, Mrs. HAWKINS, Mr. DENTON, and Mr. TRIBLE) introduced the following bill; which was read twice and referred to the Committee on the Judiciary

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A BILL

To grant the consent of the Congress of the Southeast Interstate Low-Level Radioactive Waste Management Compact.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, in accordance with section 4(a)(2) of the Low-Level Radioactive Waste Policy Act (42 U.S.C. 2021d(a)(2)), the consent of the Congress is hereby given to the States of Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia to enter into the Southeast Interstate Low-Level Radioactive Waste Management Compact. Such compact is substantially as follows:

SOUTHEAST INTERSTATE LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT COMPACT

ARTICLE I

POLICY AND PURPOSE

There is hereby created the Southeast Interstate Low-Level Radioactive Waste Management Compact. The party States recognize and declare that each state is responsible for providing for the availability of capacity either within or outside the State for disposal of low-level radioactive waste generated within its borders, except for waste generated as a result of defense activities of the federal government or federal research and development activities. They also recognize that the management of low-level radioactive waste is handled most efficiently on a regional basis. The party states further recognize that the Congress of the United States, by enacting the Low-Level Radioactive Waste Policy Act (Public Law 96–573), has provided for and encouraged the development of low-level radioactive waste compacts as a tool for disposal of such waste. The party states recognize that the safe and efficient management of low-level radioactive waste generated within the region requires that sufficient capacity to dispose of such waste be properly provided.

It is the policy of the party states to: enter into a regional low-level radioactive waste management compact for the purpose of providing the instrument and framework for a cooperative effort; provide sufficient facilities for the proper management of low-level radioactive waste generated in the region; promote the health and safety of the region; limit the number of facilities required to effectively and efficiently manage low-level radioactive waste generated in the region; encourage the reduction of the amounts of low-level waste generated in the region; distribute the costs, benefits, and obligations of successful low-level radioactive waste management equitably among the party states; and ensure the ecological and economical management of low-level radioactive wastes.

Implicit in the Congressional consent to this compact is the expectation by Congress and the party states that the appropriate federal agencies will actively assist the Compact Commission and the individual party states to this compact by:

1. expeditious enforcement of federal rules, regulations, and laws;
2. imposing sanctions against those found to be in violation of federal rules, regulations, and laws;
3. timely inspection of their licensees to determine their capability to adhere to such rules, regulations, and laws;

4. timely provision of technical assistance to this compact in carying out their obligations under the Low-Level Radioactive Waste Policy Act, as amended.

ARTICLE 2

DEFINITIONS

As used in this compact, unless the context clearly requires a different construction:

1. 'Commission' or 'Compact Commission' means the Southeast Interstate Low-Level Radioactive Waste Management Commission.

2. 'Facility' means a parcel of land, together with the structure, equipment, and improvements thereon or appurtenant thereto, which is used or is being developed for the treatment, storage, or disposal of low-level radioactive waste.

3. 'Generator' means any person who produces or processes low-level radioactive waste in the course of, or as an incident to, manufacturing, power generation, processing, medical diagnosis and treatment, research, or other industrial or commercial activity. This does not include persons who provide a service to generators by arranging for the collection, transportation, storage, or disposal of wastes with respect to such waste generated outside the region.

4. 'High-level waste' means irradiated reactor fuel, liquid wastes from reprocessing irradiated reactor fuel, and solids into which such liquid wastes have been converted, and

other high-level radioactive waste as defined by the U.S. Nuclear Regulatory Commission.

5. 'Host state' means any state in which a regional facility is situated or is being developed.

6. 'Low-level radioactive waste' or 'waste' means radioactive waste not classified as high-level radioactive waste, transuranic waste, spent nuclear fuel, or by-product material as defined in Section 11e, (2) of the Atomic Energy Act of 1954, or as may be further defined by Federal law or regulation.

7. 'Party state' means any state which is a signatory party to this compact.

8. 'Person' means any individual, corporation, business enterprise, or other legal entity (either public or private).

9. 'Region' means the collective party states.

10. 'Regional facility' means (1) a facility as defined in this article which has been designated, authorized, accepted, or approved by the Commission to receive waste or (2) the disposal facility in Barnwell County, South Carolina, owned by the State of South Carolina and as licensed for the burial of low-level radioactive waste on July 1, 1982, but in no event shall this disposal facility serve as a regional facility beyond December 31, 1992.

11. 'State' means a state of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the

Virgin Islands, or any other territorial possession of the United States.

12. 'Transuranic wastes' means waste material containing transuranic elements with contamination levels as determined by the regulations of (1) the U.S. Nuclear Regulatory Commission or (2) any host state, if it is an agreement state under Section 274 of the Atomic Energy Act of 1954.

13. 'Waste management' means the storage, treatment, or disposal of waste.

ARTICLE 3

RIGHTS AND OBLIGATIONS

The rights granted to the party states by this compact are additional to the rights enjoyed by sovereign states, and nothing in this compact shall be construed to infringe upon, limit, or abridge those rights.

(A) Subject to any license issued by the U.S. Nuclear Regulatory Commission or a host state, each party state shall have the right to have all wastes generated within its borders stored, treated, or disposed of, as applicable, at regional facilities and, additionally, shall have the right of access to facilities made available to the region through agreements entered into by the Commission pursuant to article 4(e)(9). The right of access by a generator within a party state to any regional facility is limited by its adherence to applicable state and federal law and regulation.

(B) If no operating regional facility is located within the borders of a party state and the waste generated within its borders must therefore be stored, treated, or disposed of at a regional facility in another party state, the party state without such facilities may be required by the host state or states to establish a mechanism which provides compensation for access to the regional facility according to terms and conditions established by the host state or states and approved by a two-thirds vote of the Commission.

(C) Each party state must establish the capability to regulate, license, and ensure the maintenance and extended care of any facility within its borders. Host states are responsible for the availability, the subsequent post-closure observation and maintenance, and the extended institutional control of their regional facilities in accordance with the provisions of Article 5, Section (b).

(D) Each party state must establish the capability to enforce any applicable federal or state laws and regulations pertaining to the packaging and transportation of waste generated within or passing through its borders.

(E) Each party state must provide to the Commission on an annual basis any data and information necessary to the implementation of the Commission's responsibilities. Each party state shall establish the capability to obtain any data and information necessary to meet its obligation.

(F) Each party state must, to the extent authorized by federal law, require generators within its borders to use the best available waste management technologies and practices to minimize the volumes of waste requiring disposal.

ARTICLE 4

THE COMMISSION

(A) There is hereby created the Southeast Interstate Low-Level Radioactive Waste Management Commission ('Commission' or 'Compact Commission'). The Commission shall consist of two voting members from each party state to be appointed according to the laws of each state. The appointing authorities of each state must notify the Commission in writing of the identity of its members and any alternates. An alternate may act on behalf of the member only in the member's absence.

(B) Each commission member is entitled to one vote. No action of the Commission shall be binding unless a majority of the total membership cast their vote in the affirmative, or unless a greater than majority vote is specifically required by any other provision of this compact.

(C) The Commission must elect from among its members a presiding officer. The Commission shall adopt and publish, in convenient form, bylaws which are consistent with this compact.

(D) The Commission must meet at least once a year and also meet upon the call of the presiding officer, by petition of a majority of the party states, or upon the call of a host state. All meetings of the Commission must be open to the public.

(E) The Commission has the following duties and powers:

1. To receive and approve the application of a nonparty state to become an eligible state in accordance with the provisions of Article 7(b).

2. To receive and approve the application of a nonparty state to become an eligible state in accordance with the provisions of Article 7(c).

3. To submit an annual report and other communications to the Governors and to the presiding officer of each body of the legislature of the party states regarding the activities of the Commission.

4. To develop and use procedures for determining, consistent with consideration for public health and safety, the type and number of regional facilities which are presently necessary and which are projected to be necessary to manage waste generated within the region.

5. To provide the party states with reference guidelines for establishing the criteria and procedures for evaluating alternative locations for emergency or permanent regional facilities.

6. To develop and adopt, within one year after the Commission is constituted as provided in Article 7(d) procedures and criteria for identifying a party state as a host state for a regional facility as determined pursuant to the requirements of this article. In accordance with these procedures and criteria, the Commission shall identify a host state for the development of a second regional disposal facility within three years after the Commission is constituted as provided for in Article 7(d), and shall seek to ensure that such facility is licensed and ready to operate as soon as required but in no event later than 1991.

In developing criteria, the Commission must consider the following; the health, safety, and welfare of the citizens of the party states; the existence of regional facilities within each party state; the minimization of waste transportation; the volumes and types of wastes generated within each party state; and the environmental, economic, and ecological impacts on the air, land, and water resources of the party states.

The Commission shall conduct such hearings, require such reports, studies, evidence, and testimony, and do what is required by its approved procedures in order to identify a party state as a host state for a needed facility.

7. In accordance with the procedures and criteria developed pursuant to Section (e)(6) of this Article, to designate,

by a two-thirds vote, a host state for the establishment of a needed regional facility. The Commission shall not exercise this authority unless the party states have failed to voluntarily pursue the development of such facility. The Commission shall have the authority to revoke the membership of a party state that willfully creates barriers to the siting of a needed regional facility.

8. To require of and obtain from party states, eligible states seeking to become party states, and nonparty states seeking to become eligible states, data and information necessary to the implementation of Commission responsibilities.

9. Notwithstanding any other provision of this compact, to enter into agreements with any person, state, or similar regional body or group of states for the importation of waste into the region and for the right of access to facilities outside the region for waste generated within the region. The authorization to import requires a two-thirds majority vote of the Commission, including an affirmative vote of both representatives of a host state in which any affected regional facility is located. This shall be done only after an assessment of the affected facility's capability to handle such wastes.

10. To act or appear on behalf of any party state or states, only upon written request of both members of the Commission for such state or states as an intervenor or party in interest before Congress, state legislatures, any court of

law, or any federal, state, or local agency, board, or commission which has jurisdiction over the management of wastes. The authority to act, intervene, or otherwise appear shall be exercised by the Commission, only after approval by a majority vote of the Commission.

11. To revoke the membership of a party state in accordance with Article 7(f).

F. The Commission may establish any advisory committees as it deems necessary for the purpose of advising the Commission on any matters pertaining to the management of low-level radioactive waste.

G. The Commission may appoint or contract for and compensate such limited staff necessary to carry out its duties and functions. The staff shall serve at the Commission's pleasure irrespective of the civil service, personnel, or other merit laws of any of the party states or the federal government and shall be compensated from funds of the Commission. In selecting any staff, the Commission shall assure that the staff has adequate experience and formal training to carry out such functions as may be assigned to it by the Commission. If the Commission has a headquarters it shall be in a party state.

H. Funding for the Commission must be provided as follows:

1. Each eligible state, upon becoming a party state, shall pay twenty-five thousand dollars to the Commission which shall be used for costs of the Commission's services.

2. Each state hosting a regional disposal facility shall annually levy special fees or surcharges on all users of such facility, based upon the volume of wastes disposed of at such facilities, the total of which:

a. must be sufficient to cover the annual budget of the Commission;

b. must represent the financial commitments of all party states to the Commission;

c. must be paid to the Commission;

Provided, however, That each host state collecting such fees or surcharges may retain a portion of the collection sufficient to cover its administrative costs of collection and that the remainder be sufficient only to cover the approved annual budgets of the Commission.

3. The Commission must set and approve its first annual budget as soon as practicable after its initial meeting. Host states for disposal facilities must begin imposition of the special fees and surcharges provided for in this section as soon as practicable after becoming party states and must remit to the Commission funds resulting from collection of such special fees and surcharges within sixty days of their receipt.

I. The Commission must keep accurate accounts of all receipts and disbursements. An independent certified public accountant shall annually audit all receipts and disbursements of Commission funds and submit an audit report to the Commission. The audit report shall be made a part of the annual report of the Commission required by Article 4(e)(3).

J. The Commission may accept for any of its purposes and functions any and all donations, grants of money, equipment, supplies, materials, and services (conditional or otherwise) from any state, or the United States, or any subdivision or agency thereof, or interstate agency, or from any institution, person, firm, or corporation, and may receive, utilize, and dispose of the same. The nature, amount, and condition, if any, attendant upon any donation or grant accepted pursuant to this section, together with the identity of the donor, grantor, or lender shall be detailed in the annual report to the Commission.

K. The Commission is not responsible for any costs associated with:

(1) the creation of any facility,

(2) the operation of any facility,

(3) the stabilization and closure of any facility,

(4) the post-closure observation and maintenance of any facility, or

(5) the extended institutional control, after post-closure observation and maintenance of any facility.

(L) As of January 1, 1986, the management of wastes at regional facilities is restricted to wastes generated within the region, and to wastes generated within nonparty states when authorized by the Commission pursuant to the provisions of this compact. After January 1, 1986, the Commission may prohibit the exportation of waste from the region for the purposes of management.

M. 1. The Commission herein established is a legal entity separate and distinct from the party states capable of acting in its own behalf and is liable for its actions. Liabilities of the Commission shall not be deemed liabilities of the party states. Members of the Commission shall not personally be liable for action taken by them in their official capacity.

2. Except as specifically provided in this compact, nothing in this compact shall be construed to alter the incidence of liability of any kind for any act, omission, course of conduct, or on account of any causal or other relationships. Generators and transporters of wastes and owners and operators of sites shall be liable for their acts, omissions, conduct, or relationships in acordance with all laws relating thereto.

ARTICLE 5

DEVELOPMENT AND OPERATION OF FACILITIES

A. Any party state which becomes a host state in which a regional facility is operated shall not be designated by the Compact Commission as a host state for an additional regional facility until each party state has fulfilled its obligation, as determined by the Commission, to have a regional facility operated within its borders.

B. A host state desiring to close a regional facility located within its borders may do so only after notifying the Commission in writing of its intention to do so and the reasons therefor. Such notification shall be given to the Commission at least four years prior to the intended date of closure. Notwithstanding the four-year notice requirement herein provided, a host state is not prevented from closing its facility or establishing conditions of its use and operations as necessary for the protection of the health and safety of its citizens. A host state may terminate or limit access to its regional facility if it determines that Congress has materially altered the conditions of this compact.

C. Each party state designated as a host state for a regional facility shall take appropriate steps to ensure that an application for a license to construct and operate a facility of the designated type is filed with and issued by the appropriate authority.

D. No party state shall have any form of arbitrary prohibition on the treatment, storage, or disposal of low-level radioactive waste within its borders.

ARTICLE 6

OTHER LAWS AND REGULATIONS

(A) Nothing in this compact shall be construed to:

(1) Abrogate or limit the applicability of any act of Congress or diminish or otherwise impair the jurisdiction of any federal agency expressly conferred thereon by the Congress.

(2) Abrogate or limit the regulatory responsibility and authority of the U.S. Nuclear Regulatory Commission or of an agreement state under Section 274 of the Atomic Energy Act of 1954 in which a regional facility is located.

(3) Make inapplicable to any person or circumstance any other law of a party state which is not inconsistent with this compact.

(4) Make unlawful the continued development and operation of any facility already licensed for development or operation on the date this compact becomes effective, except that any such facility shall comply with Article 3, Article 4, and Article 5 and shall be subject to any action lawfully taken pursuant thereto.

(5) Prohibit any storage or treatment of waste by the generator on its own premises.

(6) Affect any judicial or administrative proceeding pending on the effective date of this compact.

(7) Alter the relations between, and the respective internal responsibilities of, the government of a party state and its subdivisions.

(8) Affect the generation, treatment, storage, or disposal of waste generated by the atomic energy defense activities of the Secretary of the United States Department of Energy or federal research and development activities as defined in Public Law 96-573.

(9) Affect the rights and powers of any party state and its political subdivisions to regulate and license any facility within its borders or to affect the rights and powers of any party state and its political subdivisions to tax or impose fees on the waste managed at any facility within its borders.

B. No party shall pass any law or adopt any regulation which is inconsistent with this compact. To do so may jeopardize the membership status of the party state.

C. Upon formation of the compact no law or regulation of a party state or of any subdivision or instrumentality thereof may be applied so as to restrict or make more inconvenient access to any regional facility by the generators of another party state than for the generators of the state where the facility is situated.

D. Restrictions of waste management of regional facilities pursuant to Article 4 shall be enforceable as a matter of state law.

ARTICLE 7

ELIGIBLE PARTIES; WITHDRAWAL; REVOCATION; ENTRY INTO FORCE; TERMINATION

A. This compact shall have as initially eligible parties the States of Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia.

B. Any state not expressly declared eligible to become a party state to this compact in Section (A) of this Article may petition the Commission, once constituted, to be declared eligible. The Commission may establish such conditions as it deems necessary and appropriate to be met by a state wishing to become eligible to become a party state to this compact pursuant to such provisions of this section. Upon satisfactorily meeting the conditions and upon the affirmative vote of two-thirds of the Commission, including the affirmative vote of both representatives of a host state in which any affected regional facility is located, the petitioning state shall be eligible to become a party state to this compact and may become a party state in the manner as those states declared eligible in Section (a) of this Article.

C. Each state eligible to become a party state to this compact shall be declared a party state upon enactment of this compact into law by the state and upon payment of the fees required by Article 4(H)(1). The Commission is the judge of the qualifications of the party states and of its members and of their compliance with the conditions and requirements of this compact and the laws of the party states relating to the enactment of this compact.

D. 1. The first three states eligible to become party states to this compact which enact this compact into law and appropriate the fees required by Article 4(H)(1) shall immediately, upon the appointment of their Commission members, constitute themselves as the Southeast Low-Level Radioactive Waste Management Commission; shall cause legislation to be introduced in Congress which grants the consent of Congress to this compact; and shall do those things necessary to organize the commission and implement the provisions of this compact.

2. All succeeding states eligible to become party states to this compact shall be declared party states pursuant to the provisions of Section (C) of this Article.

3. The consent of Congress shall be required for the full implementation of this compact. The provisions of Article 5 Section (D) shall not become effective until the effective date of the import ban authorized by Article 4, Section (L) as

approved by Congress. Congress may by law withdraw its consent only every five years.

E. No state which holds membership in any other regional compact for the management of low-level radioactive waste may be considered by the Compact Commission for eligible state status or party state status.

F. Any party state which fails to comply with the provisions of this compact or to fulfill the obligations incurred by becoming a party state to this compact may be subject to sanctions by the Commission, including suspension of its rights under this compact and revocation of its status as a party state. Any sanction shall be imposed only upon the affirmative vote of at least two-thirds of the Commission members. Revocation of party state status may take effect on the date of the meeting at which the Commission approves the resolution imposing such sanction, but in no event shall revocation take effect later than ninety days from the date of such meeting. Rights and obligations incurred by being declared a party state to this compact shall continue until the effective date of the sanction imposed or as provided in the resolution of the Commission imposing the sanction.

The Commission must, as soon as practicable after the meeting at which a resolution revoking status as a party state is approved, provide written notice of the action, along with a copy of the resolution, to the Governors, the Presidents of the Senates, and the Speakers of the Houses of Representatives of the party states, as well as chairmen of the appropriate committees of Congress.

G. Any party state may withdraw from the compact by enacting a law repealing the compact; provided, that if a regional facility is located within such a state, such regional facility shall remain available to the region for four years after the date the Commission receives notification in writing from the governor of such party state of the rescission of the compact. The Commission, upon receipt of the notification, shall as soon as practicable provide copies of such notification to the Governors, the Presidents of the Senates, and the Speakers of the Houses of Representatives of the party states as well as the chairmen of the appropriate committees of Congress.

H. This compact may be terminated only by the affirmative action of Congress or by the rescission of all laws enacting the compact in each party state.

ARTICLE 8

PENALTIES

A. Each party state, consistently with its own law, shall prescribe and enforce penalties against any person not an official of another state for violation of any provisions of this compact.

B. Each party state acknowledges that the receipt by a host state of waste packaged or transported in violation of applicable laws and regulations can result in the imposition of sanctions by the host state which may include suspension or revocation of the violator's right of access to the facility in the host state.

ARTICLE 9

SEVERABILITY AND CONSTRUCTION

The provisions of this compact shall be severable and if any phrase, clause, sentence, or provision of this compact is declared by a court of competent jurisdiction to be contrary to the Constitution of any participating state or of the United States, or the applicability thereof to any government, agency, person, or circumstance is held invalid, the validity of the remainder of this compact and the applicability thereof to any other government, agency, person, or circumstance shall not be affected thereby. If any provision of this compact shall be held contrary to the Constitution of any State participating therein, the compact shall remain in full force and effect as to the state affected as to all severable matters. The provisions of this compact shall be liberally construed to give effect to the purposes thereof.

SEC. 2. Nothing contained in this Act or in the compact consented to in this Act may be construed as impairing or otherwise affecting in any manner any right or jurisdiction of the United States with respect to the region that is the subject of such compact.

SEC. 3. The right of the Congress to alter, amend, or repeal this Act is expressly reserved.

II

99TH CONGRESS
1ST SESSION

S. 356

Granting the consent of Congress to the Northwest Interstate Compact on Low-level Radioactive Waste Management.

IN THE SENATE OF THE UNITED STATES

JANUARY 31 (legislative day, JANUARY 21), 1985

Mr. GORTON (for himself, Mr. HATFIELD, Mr. HATCH, Mr. MURKOWSKI, Mr. JOHNSTON, Mr. MATSUNAGA, Mr. BAUCUS, Mr. INOUYE, Mr. GARN, Mr. MCCLURE, and Mr. STEVENS) introduced the following bill; which was read twice and referred to the Committee on the Judiciary

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A BILL

Granting the consent of Congress to the Northwest Interstate Compact on Low-level Radioactive Waste Management.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the consent of Congress is hereby given to the states of Alaska, Hawaii, Idaho, Montana, Oregon, Utah, Washington, and Wyoming to enter into the Northwest Interstate Compact on Low-level Radioactive Waste Management, and to each and every part and article thereof. Such compact reads substantially as follows:

"NORTHWEST INTERSTATE COMPACT ON LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT

"ARTICLE I—POLICY AND PURPOSE

"The party states recognize that low-level radioactive wastes are generated by essential activities and services that benefit the citizens of the states. It is further recognized that the protection of the health and safety of the citizens of the party states and the most economical management of low-level radioactive wastes can be accomplished through cooperation of the states in minimizing the amount of handling and transportation required to dispose of such wastes and through the cooperation of the states in providing facilities that serve the region. It is the policy of the party states to undertake the necessary cooperation to protect the health and safety of the citizens of the party states and to provide for the most economical management of low-level radioactive wastes on a continuing basis. It is the purpose of this compact to provide the means for such a cooperative effort among the party states so that the protection of the citizens of the states and the maintenance of the viability of the states' economies will be enhanced while sharing the responsibilities of radioactive low-level waste management.

"ARTICLE II—DEFINITIONS

"As used in this compact:

"(1) 'Facility' means any site, location, structure, or property used or to be used for the storage, treatment, or disposal of low-level waste, excluding federal waste facilities;

"(2) 'Low-level waste' means waste material which contains radioactive nuclides emitting primarily beta or gamma radiation, or both, in concentrations or quantities which exceed applicable federal or state standards for unrestricted release. Low-level waste does not include waste containing more than ten (10) nanocuries of transuranic contaminants per gram of material, nor spent reactor fuel, nor material classified as either high-level waste or waste which is unsuited for disposal by near-surface burial under any applicable federal regulations;

"(3) 'Generator' means any person, partnership, association, corporation, or any other entity whatsoever which, as a part of its activities, produces low-level radioactive waste;

"(4) 'Host state' means a state in which a facility is located.

"ARTICLE III—REGULATORY PRACTICES

"Each party state hereby agrees to adopt practices which will require low-level waste shipments originating within its borders and destined for a facility within another party state to conform to the applicable packaging and transportation requirements and regulations of the host state. Such practices shall include:

"(1) Maintaining an inventory of all generators within the state that have shipped or expect to ship low-level waste to facilities in another party state;

"(2) Periodic unannounced inspection of the premises of such generators and the waste management activities thereon;

"(3) Authorization of the containers in which such waste may be shipped, and a requirement that generators use only that type of container authorized by the state;

"(4) Assurance that inspections of the carriers which transport such waste are conducted by proper authorities, and appropriate enforcement action taken for violations;

"(5) After receiving notification from a host state that a generator within the party state is in violation of applicable packaging or transportation standards, the party state will take appropriate action to assure that such violations do not recur. Such action may include inspection of every individual low-level waste shipment by that generator.

Each party state may impose fees upon generators and shippers to recover the cost of the inspections and other practices under this article. Nothing in this article shall be construed to limit any party state's authority to impose additional or more stringent standards on generators or carriers than those required under this article.

"ARTICLE IV—REGIONAL FACILITIES

"(1) Facilities located in any party state, other than facilities established or maintained by individual low-level waste generators for the management of their own low-level waste, shall accept low-level waste generated in any party state if such waste has been packaged and transported according to applicable laws and regulations.

"(2) No facility located in any party state may accept low-level waste generated outside of the region comprised of the party states, except as provided in article V.

"(3) Until such time as paragraph (2) of article IV takes effect, facilities located in any party state may accept low-level waste generated outside of any of the party states only if such waste is accompanied by a certificate of compliance issued by an official of the state in which such waste shipment originated. Such certificate shall be in such form as may be required by the host state, and shall contain at least the following:

"(A) The generator's name and address;

"(B) A description of the contents of the low-level waste container.

"(C) A statement that the low-level waste being shipped has been inspected by the official who issued the certificate or by his agent or by a representative of the United States Nuclear Regulatory Commission, and found to have been packaged in compliance with applicable Federal regulations and such additional requirements as may be imposed by the host state;

"(D) A binding agreement by the state of origin to reimburse any party state for any liability or expense incurred as a result of an accidental release of such waste during shipment or after such waste reaches the facility.

"(4) Each party state shall cooperate with the other party states in determining the appropriate site of any facility that might be required within the region comprised of the party states, in order to maximize public health and safety while minimizing the use of any one (1) party state as the host of such facilities on a permanent basis. Each party state further agrees that decisions regarding low-level waste management facilities in their region will be reached through a good faith process which takes into account the burdens borne by each of the party states as well as the benefits each has received.

"(5) The party states recognize that the issue of hazardous chemical waste management is similar in many respects to that of low-level waste management. Therefore, in consideration of the State of Washington allowing access to its low-level waste disposal facility by generators in other party states, party states such as Oregon and Idaho which host hazardous chemical waste disposal facilities will allow access to such facilities by generators within other party states. Nothing in this compact shall be construed to prevent any party state from limiting the nature and type of hazardous chemical or low-level wastes to be accepted at facilities within its borders or from ordering the closure of such facilities, so long as such action by a host state is applied equally to all generators within the region comprised of the party states.

"(6) Any host state may establish a schedule of fees and requirements related to its facility, to assure that closure, perpetual care, and maintenance and contingency requirements are met, including adequate bonding.

"ARTICLE V—NORTHWEST LOW-LEVEL WASTE COMPACT COMMITTEE

"The governor of each party state shall designate one (1) official of that state as the person responsible for administration of this compact. The officials so designated shall together comprise the northwest low-level waste compact committee. The committee shall meet as required to consider matters arising under this compact. The parties shall inform the committee of existing regulations concerning low-level waste management in their states, and shall afford all parties a reasonable opportunity to review and comment upon any proposed modifications in such regulations. Notwithstanding any provision of article IV to the contrary, the committee may enter into arrangements with states provinces, individual generators, or regional compact entities outside the region comprised of the party states for access to facilities on such terms and conditions as the committee may deem appropriate. However, it shall require a two thirds (⅔) vote of all such members, including the affirmative vote of the member of any party state in which a facility affected by such arrangement is located, for the committee to enter into such arrangement.

"ARTICLE VI—ELIGIBLE PARTIES AND EFFECTIVE DATE

"(1) Each of the following states is eligible to become a party to this compact: Alaska, Hawaii, Idaho, Montana, Oregon, Utah, Washington, and Wyoming. As to any eligible party, this compact shall become effective upon enactment into law by that party, but it shall not become initially effective until enacted into law by two (2) states. Any party state may withdraw from this compact by enacting a statute repealing its approval.

"(2) After the compact has initially taken effect pursuant to paragraph (1) of this article, any eligible party state may become a party ot this compact by the execution of an executive order by the governor of the state. Any state which becomes a party in this manner shall cease to be a party upon the final adjournment of the next general or regular session of its legislature or July 1, 1983, whichever occurs first, unless the compact has by then been enacted as a statute by that state.

"(3) Paragraph (2) of article IV of this compact shall take effect on July 1, 1983, if consent is given by Congress. As provided in public law 96-573, Congress may withdraw its consent to the compact after every five (5) year period.

"ARTICLE VII—SEVERABILITY

"If any provision of this compact, or its application to any person or circumstances, is held to be invalid, all other provisions of this compact, and the application of all of its provisions to all other persons and circumstances, shall remain valid; and to this end the provisions of this compact are severable."

SEC. 2. Congress finds that the compact consented to herein is in furtherance of the policy contained in section 4(a)(1) of the Low-level Radioactive Waste Policy Act of 1980 and with the intent of Section 274(b) of the Atomic Energy Act of 1954. In order that this compact may be given full effect, the Nuclear Regulatory Commission is authorized and directed to require licensees subject to its jurisdiction under the Atomic Energy Act of 1954 to comply with the provisions of this compact. The Commission shall consult and cooperate with the states which are parties to this compact in carrying out this section.

SEC. 3. The Consent of Congress granted pursuant to this act is limited by the following conditions:

(a) Notwithstanding the provisions of Article V and Article VI, Paragraph (3) of the Northwest Interstate Compact on Low-Level Radioactive Waste Management, Article IV, paragraph (2) of that compact shall not take effect until January 1, 1986.

(b) The right of Congress to alter, amend, or repeal this Act is hereby expressly reserved.

II

99TH CONGRESS
1ST SESSION

S. 442

To grant the consent of the Congress to the Rocky Mountain Low-Level Radioactive Waste Compact.

IN THE SENATE OF THE UNITED STATES

FEBRUARY 7 (legislative day, JANUARY 21), 1985

Mr. SIMPSON (for himself, Mr. ARMSTRONG, Mr. BINGAMAN, Mr. DOMENICI, Mr. GARN, Mr. HART, Mr. HATCH, Mr. HECHT, Mr. LAXALT, and Mr. WALLOP) introduced the following bill; which was read twice and referred to the Committee on the Judiciary

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A BILL

To grant the consent of the Congress to the Rocky Mountain Low-Level Radioactive Waste Compact.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, in accordance with section 4(a)(2) of the Low-Level Radioactive Waste Policy Act (42 U.S.C. 2021d(a)(2)), the consent of the Congress hereby is given to the States of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming to enter into the Rocky Mountain Interstate Low-Level Radioactive Waste Compact.

Such compact is substantially as follows:

ROCKY MOUNTAIN LOW-LEVEL RADIOACTIVE WASTE COMPACT

ARTICLE I. FINDINGS AND PURPOSE

(a) The party states agree that each state is responsible for providing for the management of low-level radioactive waste generated within its borders, except for waste generated as a result of defense activities of the federal government or federal research and development activities. Moreover, the party states find that the United States Congress, by enacting the "Low-Level Radioactive Waste Policy Act" (P. L. 96–573), has encouraged the use of interstate compacts to provide for the establishment and operation of facilities for regional management of low-level radioactive waste.

(b) It is the purpose of the party states, by entering into an interstate compact, to establish the means for cooperative effort in managing low-level radioactive waste; to ensure the availability and economic viability of sufficient facilities for the proper and efficient management of low-level radioactive waste generated within the region while preventing unnecessary and uneconomic proliferation of such facilities; to encourage reduction of the volume of low-level radioactive waste requiring disposal within the region; to restrict management within the region of low-level radioactive waste generated outside the region; to distribute the costs, benefits and obligations of low-level radioactive waste management equitably among the party states; and by these means to promote the health, safety and welfare of the residents within the region.

ARTICLE II. DEFINITIONS

As used in this compact, unless the context clearly indicates otherwise:

(a) "Board" means the Rocky Mountain low-level radioactive waste board;

(b) "Carrier" means a person who transports low-level waste;

(c) "Disposal" means the isolation of waste from the biosphere, with no intention of retrieval, such as by land burial;

(d) "Facility" means any property, equipment or structure used or to be used for the management of low-level waste;

(e) "Generate" means to produce low-level waste;

(f) "Host state" means a party state in which a regional facility is located or being developed;

(g) "Low-level waste" or "waste" means radioactive waste other than:

(i) Waste generated as a result of defense activities of the federal government or federal research and development activities;

(ii) High-level waste such as irradiated reactor fuel, liquid waste from reprocessing irradiated reactor fuel, or solids into which any such liquid waste has been converted;

(iii) Waste material containing transuranic elements with contamination levels greater than ten (10) nanocuries per gram of waste material;

(iv) By-product material as defined in Section 11e.(2) of the "Atomic Energy Act of 1954," as amended November 8, 1978; or

(v) Wastes from mining, milling, smelting or similar processing of ores and mineral-bearing material primarily for minerals other than radium.

(h) "Management" means collection, consolidation, storage, treatment, incineration or disposal;

(i) "Operator" means a person who operates a regional facility;

(j) "Person" means an individual, corporation, partnership or other legal entity, whether public or private;

(k) "Region" means the combined geographic area within the boundaries of the party states; and

(l) "Regional facility" means a facility within any party state which either:

(i) has been approved as a regional facility by the board; or

(ii) is the low-level waste facility in existence on January 1, 1982, at Beatty, Nevada.

ARTICLE III

RIGHTS, RESPONSIBILITIES, AND OBLIGATIONS

(a) There shall be regional facilities sufficient to manage the low-level waste generated within the region. At least one (1) regional facility shall be open and operating in a party state other than Nevada within six (6) years after this compact becomes law in Nevada and in one (1) other state.

(b) Low-level waste generated within the region shall be managed at regional facilities without discrimination among the party states; provided, however, that a host state may close a regional facility when necessary for public health or safety.

(c) Each party state which, according to reasonable projections made by the board, is expected to generate twenty percent (20%) or more in cubic feet except as othewise determined by the board of the low-level waste generated within the region has an obligation to become a host state in compliance with subsection (d) of this article.

(d) A host state, or a party state seeking to fulfill its obligation to become a host state, shall:

(i) Cause a regional facility to be developed on a timely basis as determined by the board, and secure the approval of such regional facility by the board as provided in Article IV before allowing site preparation or physical construction to begin;

(ii) Ensure by its own law, consistent with any applicable federal law, the protection and preservation of public health and safety in the siting, design, development, licensure or other regulation, operation, closure, decommissioning and long-term care of the regional facilities within the state;

(iii) Subject to the approval of the board, ensure that charges for management of low-level waste at the regional facilities within the state are reasonable;

(iv) Solicit comments from each other party state and the board regarding siting, design, development, licensure or other regulation, operation, closure, decommissioning and long-term care of the regional facilities within the state and respond in writing to such comments;

(v) Submit an annual report to the board which contains projections of the anticipated future capacity and availability of the regional facilities within the state, together with other information required by the board; and

(vi) Notify the board immediately if any exigency arises requiring the possible temporary or permanent closure of a regional facility within the state at a time earlier than was projected in the state's most recent annual report to the board.

(e) Once a party state has served as a host state, it shall not be obligated to serve again until each other party state having an obligation under subsection (c) of this article has fulfilled that obligation. Nevada, already being a host state, shall not be obligated to serve again as a host state until every other party state has so served.

(f) Each party state:

(i) Agrees to adopt and enforce procedures requiring low-level waste shipments originating within its borders and destined for a regional facility to conform to packaging and transportation requirements and regulations. Such procedures shall include but are not limited to:

(A) Periodic inspection of packaging and shipping practices;

(B) Periodic inspections of waste containers while in the custody of carriers; and

(C) Appropriate enforcement actions with respect to violations.

(ii) Agrees that after receiving notification from a host state that a person in the party state has violated packaging, shipping or transportation requirements or regulations, it shall take appropriate action to ensure that violations do not recur. Appropriate action may include but is not limited to the requirement that a bond be posted by the violator to pay the cost of repackaging at the regional facility and the requirement that future shipments be inspected;

(iii) May impose fees to recover the cost of the practices provided for in paragraph (i) and (ii) of this subsection;

(iv) Shall maintain an inventory of all generators within the state that may have low-level waste to be managed at a regional facility; and

(v) May impose requirements or regulations more stringent than those required by this subsection.

ARTICLE IV. BOARD APPROVAL OF REGIONAL FACILITIES

(a) Within ninety (90) days after being requested to do so by a party state, the board shall approve or disapprove a regional facility to be located within that state.

(b) A regional facility shall be approved by the board if and only if the board determines that:

(i) There will be, for the foreseeable future, sufficient demand to render operation of the proposed facility economically feasible without endangering the economic feasibility of operation of any other regional facility; and

(ii) The facility will have sufficient capacity to serve the needs of the region for a reasonable period of years.

ARTICLE V. SURCHARGES

(a) The board shall impose a "compact surcharge" per unit of waste received at any regional facility. The surcharge shall be adequate to pay the costs and expenses of the board in the conduct of its authorized activities and may be increased or decreased as the board deems necessary.

(b) A host state may impose a "state surcharge" per unit of waste received at any regional facility within the state. The host state may fix and change the amount of the state surcharge subject to approval by the board. Money received from the state surcharge may be used by the host state for any purpose authorized by its own law, including but not limited to costs of licensure and regulatory activities related to the regional facility, reserves for decommissioning and long-term care of the regional facility and local impact assistance.

ARTICLE VI. THE BOARD

(a) The "Rocky Mountain low-level radioactive waste board", which shall not be an agency or instrumentality of any party state, is created.

(b) The board shall consist of one (1) member from each party state. The governor shall determine how and for what term its member shall be appointed, and how and for what term any alternate may be appointed to perform that member's duties on the board in the member's absence.

(c) Each party state is entitled to one (1) vote. A majority of the board constitutes a quorum. Unless otherwise provided in this compact, a majority of the total number of votes on the board is necessary for the board to take any action.

(d) The board shall meet at least once a year and otherwise as its business requires. Meetings of the board may be held in any place within the region deemed by the board to be reasonably convenient for the attendance of persons required or entitled to attend and where adequate accommodations may be found. Reasonable public notice and opportunity for comment shall be given with respect to any meeting; provided, however, that nothing in this subsection shall preclude the board from meeting in executive session when seeking legal advice from its attorneys or when discussing the employment, discipline or termination of any of its employees.

(e) The board shall pay necessary travel and reasonable per diem expenses of its members, alternates, and advisory committee members.

(f) The board shall organize itself for the efficient conduct of its business. It shall adopt and publish rules consistent with this compact regarding its organization and procedures. In special circumstances the board, with unanimous consent of its members, may take actions by telephone; provided, however, that any action taken by telephone shall be confirmed in writing by each member within thirty (30) days. Any action taken by telephone shall be noted in the minutes of the board.

(g) The board may use for its purposes the services of any personnel or other resources which may be offered by any party state.

(h) The board may establish its offices in space provided for that purpose by any of the party states, or, if space is not provided or is deemed inadequate, in any space within the region selected by the board.

(i) Consistent with available funds, the board may contract for necessary personnel services to carry out its duties. Staff shall be employed without regard for the personnel, civil service, or merit system laws of any of the party states and shall serve at the pleasure of the board. The board may provide appropriate employee benefit programs for its staff.

(j) The board shall establish a fiscal year which conforms to the extent practicable to the fiscal years of the party states.

(k) The board shall keep an accurate account of all receipts and disbursements. An annual audit of the books of the board shall be conducted by an independent certified public accountant, and the audit report shall be made a part of the annual report of the board.

(l) The board shall prepare and include in the annual report a budget showing anticipated receipts and disbursements for the ensuing year.

(m) Upon legislative enactment of this compact, each party State shall consider the need to appropriate seventy thousand dollars ($70,000.00) to the board to support its activities prior to the collection of sufficient funds through the compact surcharge imposed pursuant to subsection (a) of article V of this compact.

(n) The board may accept any donations, grants, equipment, supplies, materials or services, conditional or otherwise, from any source. The nature, amount and condition, if any, attendant upon any donation, grant or other resources accepted pursuant to this subsection, together with the identity of the donor or grantor, shall be detailed in the annual report of the board.

(o) In addition to the powers and duties conferred upon the board pursuant to other provisions of this compact, the board:

(i) Shall submit communications to the governors and to the presiding officers of the legislatures of the party states regarding the activities of the board, including an annual report to be submitted by December 15;

(ii) May assemble and make available to the governments of the party states and to the public through its members information concerning low-level waste management needs, technologies and problems;

(iii) Shall keep a current inventory of all generators within the region, based upon information provided by the party states;

(iv) Shall keep a current inventory of all regional facilities, including information on the size, capacity, location, specific wastes capable of being managed and the projected useful life of each regional facility;

(v) May keep a current inventory of all low-level waste facilities in the region, based upon information provided by the party states;

(vi) Shall ascertain on a continuing basis the needs for regional facilities and capacity to manage each of the various classes of low-level waste;

(vii) May develop a regional low-level waste management plan;

(viii) May establish such advisory committees as it deems necessary for the purpose of advising the board on matters pertaining to the management of low-level waste;

(ix) May contract as it deems appropriate to accomplish its duties and effectuate its powers, subject to its projected available resources; but no contract made by the board shall bind any party state;

(x) Shall make suggestions to appropriate officials of the party states to ensure that adequate emergency response programs are available for dealing with any exigency that might arise with respect to low-level waste transportation or management;

(xi) Shall prepare contingency plans, with the cooperation and approval of the host state, for management of low-level waste in the event any regional facility should be closed;

(xii) May examine all records of operators of regional facilities pertaining to operating costs, profits or the assessment or collection of any charge, fee or surcharge;

(xiii) Shall have the power to sue; and

(xiv) When authorized by unanimous vote of its members, may intervene as of right in any administrative or judicial proceeding involving low-level waste.

ARTICLE VII. PROHIBITED ACTS AND PENALTIES

(a) It shall be unlawful for any person to dispose of low-level waste within the region, except at a regional facility; provided, however, that a generator who, prior to January 1, 1982, had been disposing of only his own waste on his own property may, subject to applicable federal and state law, continue to do so.

(b) After January 1, 1986, it shall be unlawful for any person to export low-level waste which was generated within the region outside the region unless authorized to do so by the board. In determining whether to grant such authorization, the factors to be considered by the board shall include, but not be limited to, the following:

(i) The economic impact of the export of the waste on the regional facilities;

(ii) The economic impact on the generator of refusing to permit the export of the waste; and

(iii) The availability of a regional facility appropriate for the disposal of the waste involved.

(c) After January 1, 1986, it shall be unlawful for any person to manage any low-level waste within the region unless the waste was generated within the region or unless authorized to do so both by the board and by the state in which said management takes place. In determining whether to grant such authorization, the factors to be considered by the board shall include, but not be limited to, the following:

(i) the impact of importing waste on the available capacity and projected life of the regional facilities;

(ii) the economic impact on the regional facilities; and

(iii) the availability of a regional facility appropriate for the disposal of the type of waste involved.

(d) It shall be unlawful for any person to manage at a regional facility any radioactive waste other than low-level waste as defined in this compact, unless authorized to do so both by the board and the host state. In determining whether to grant such authorization, the factors to be considered by the board shall include, but not be limited to, the following:

(i) the impact of allowing such management on the available capacity and projected life of the regional facilities;

(ii) the availability of a facility appropriate for the disposal of the type of waste involved;

(iii) the existence of transuranic elements in the waste; and

(iv) the economic impact on the regional facilities.

(e) Any person who violates subsection (a) or (b) of this article shall be liable to the board for a civil penalty not to exceed ten (10) times the charges which would have been charged for disposal of the waste at a regional facility.

(f) Any person who violates subsection (c) or (d) of this article shall be liable to the board for a civil penalty not to exceed ten (10) times the charges which were charged for management of the waste at a regional facility.

(g) The civil penalties provided for in subsections (e) and (f) of this article may be enforced and collected in any court of general jurisdiction within the region where necessary jurisdiction is obtained by an appropriate proceeding commenced on behalf of the board by the attorney general of the party state wherein the proceeding is brought or by other counsel authorized by the board. In any such proceeding, the board, if it prevails, is entitled to recover reasonable attorney's fees as part of its costs.

(h) Out of any civil penalty collected for a violation of subsection (a) or (b) of this article, the board shall pay to the appropriate operator a sum sufficient in the judgment of the board to compensate the operator for any loss of revenue attributable to the violation. Such compensation may be subject to state and compact surcharges as if received in the normal course of the operator's business. The remainder of the civil penalty collected shall be allocated by the board. In making such allocation, the board shall give first priority to the needs of the long-term care funds in the region.

(i) Any civil penalty collected for a violation of subsection (c) or (d) of this article shall be allocated by the board. In making such allocation, the board shall give first priority to the needs of the long-term care funds in the region.

(j) Violations of subsection (a), (b), (c), or (d) of this article may be enjoined by any court of general jurisdiction within the region where necessary jurisdiction is obtained in any appropriate proceeding commenced on behalf of the board by the attorney general of the party state wherein the proceeding is brought or by other counsel authorized by the board. In any such proceeding, the board, if it prevails, is entitled to recover reasonable attorney's fees as part of its costs.

(k) No state attorney general shall be required to bring any proceeding under any subsection of this article, except upon his consent.

ARTICLE VIII. ELIGIBILITY, ENTRY INTO EFFECT, CONGRESSIONAL CONSENT, WITHDRAWAL, EXCLUSION

(a) Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming are eligible to become parties to this compact. Any other state may be made eligible by unanimous consent of the board.

(b) An eligible state may become a party state by legislative enactment of this compact or by executive order of its governor adopting this compact; provided, however, a state becoming a party by executive order shall cease to be a party state upon adjournment of the first general session of its legislature convened thereafter, unless before such adjournment the legislature shall have enacted this compact.

(c) This compact shall take effect when it has been enacted by the legislatures of two (2) eligible states. However, subsections (b) and (c) of article VII shall not take effect until Congress has by law consented to this compact. Every five (5) years after such consent has been given, Congress may by law withdraw its consent.

(d) A state which has become a party state by legislative enactment may withdraw by legislation repealing its enactment of this compact; but no such repeal shall take effect until two (2) years after enactment of the repealing legislation. If the withdrawing state is a host state, any regional facility in that state shall remain available to receive low-level waste generated within the region until five (5) years after the effective date of the withdrawal; provided, however, this provision shall not apply to the existing facility in Beatty, Nevada.

(e) A party state may be excluded from this compact by a two-thirds (⅔) vote of the members representing the other party states, acting in a meeting, on the ground that the state to be excluded has failed to carry out its obligation under this compact. Such an exclusion may be terminated upon a two-thirds (⅔) vote of the members acting in a meeting.

ARTICLE IX. CONSTRUCTION AND SEVERABILITY

(a) The provisions of this compact shall be broadly construed to carry out the purposes of the compact.

(b) Nothing in this compact shall be construed to affect any judicial proceeding pending on the effective date of this compact.

(c) If any part or application of this compact is held invalid, the remainder, or its application to other situations or persons, shall not be affected.

SEC. 2. The Congress hereby finds that the compact consented to in this Act is in furtherance of the policy set forth in section 4(a)(1) of the Low-Level Radioactive Waste Policy Act (42 U.S.C. 2021d(a)(1)). In order that such compact may be given full effect, the Nuclear Regulatory Commission shall consult and cooperate with the States that are parties to such compact in carrying out this subsection.

SEC. 3. Nothing contained in this Act or in the compact consented to in this Act may be construed as impairing or otherwise affecting in any manner any right or jurisdiction of the United States with respect to the region that is the subject of such compact.

SEC. 4. The right of the Congress to alter, amend, or repeal this Act is expressly reserved.

The CHAIRMAN. I am pleased to have as witnesses today the Governor of South Carolina, Richard W. Riley, along with spokespersons from the States of Washington, Illinois, California, and Massachusetts. We will also receive testimony from the Departments of Justice and Energy, the Nuclear Regulatory Commission, and the Environmental Protection Agency.

Additionally, we will hear from two representatives of low-level waste generators in the field of medicine and industry.

Now, our first witness this morning is Ralph W. Tarr, Acting Assistant Attorney General, Office of General Counsel, U.S. Department of Justice, Washington, DC.

Mr. Tarr, we are glad to have you with us.

STATEMENT OF HON. RALPH W. TARR, ACTING ASSISTANT ATTORNEY GENERAL, OFFICE OF LEGAL COUNSEL, U.S. DEPARTMENT OF JUSTICE, WASHINGTON, DC

Mr. TARR. Thank you, Mr. Chairman.

The CHAIRMAN. Now, we have got a lot of witnesses today and we have got to finish these hearings by lunchtime, as we have some other meetings scheduled, and I would suggest that we put your entire statement in the record, if that meets your approval, and then let you just summarize briefly the thrust of your statement. Is that agreeable to you?

Mr. TARR. That would be fine, Mr. Chairman.

The CHAIRMAN. Without objection, that will be done.

You may proceed now, Mr. Tarr.

Mr. TARR. Thank you, Mr. Chairman.

As you know, the statement that we have prepared for submission this morning is rather brief. In any case, I will summarize it simply by saying that during the time that we have had to review these pieces of legislation proposing that the Congress consent to the compacts, we have had the ability as time goes on to do more and more research, and to gather more factual information surrounding them, and we are now confident that there is no impediment to Congress proceeding with consenting to them.

There were some considerations that we have provided to the committee that you may want to consider in deciding to approve or disapprove of the compacts, but none of those do we feel rise to the level that the Department of Justice would recommend that the Congress not proceed.

The CHAIRMAN. Any other statements you want to make?

Mr. TARR. No, Mr. Chairman.

The CHAIRMAN. As I understand then, the Justice Department approves these compacts as have been brought forward for consideration by the Senate?

Mr. TARR. Yes, sir.

The CHAIRMAN. I have a few questions here that you may want to answer for the record, and rather than take time to ask them all at this time, you can just answer for the record. When you get these, answer them for the record.

All right, thank you very much.

Mr. TARR. Thank you.

[Prepared statement, and responses to written questions, follow:]

STATEMENT

OF

RALPH W. TARR
ACTING ASSISTANT ATTORNEY GENERAL
OFFICE OF LEGAL COUNSEL

Mr. Chairman and Members of the Committee:

Thank you for affording me the opportunity to appear before you today on behalf of the Department of Justice to discuss S. 44, S. 356, and S. 442, bills that would grant the consent of Congress to the Southeast, Northwest, and Rocky Mountain interstate compacts on the management of low-level radioactive waste. As you know, the Department of Justice reviewed these compacts, plus a fourth -- the Central Low-Level Radioactive Waste Compact -- towards the end of the 98th Congress. Attached to my prepared statement are copies of the two letters the Department sent to the Committee at that time, outlining our preliminary analysis of the legal issues raised by the compacts.

Those letters reflect what is probably apparent to the Committee already -- that the implementation of interstate compacts can raise extraordinarily difficult legal questions, questions that have not necessarily been resolved by the courts. These questions arise because of the unique hybrid nature of interstate compacts, which are at the same time agreements between the states that impose obligations on each member, and "federal law" by virtue of congressional consent, at least in the sense that the compacts may be enforceable in the federal courts. This hybrid was intended by the Framers of the Constitution to fill an important gap in our federal system between the states and the federal government, and to allow for flexible and innovative approaches by the states to problems that are best handled on a regional, rather than national, level. */

It would be useful to focus on Congress's responsibility and role in granting its consent to compacts such as the three before you now. The Compact Clause of the Constitution, Art. 1, § 10, cl. 3, makes congressional assent a prerequisite to performance by any two or more states of "any Agreement or Compact . . . ." that enhances the political power of the several states in a way that may threaten the supremacy of the United States. See United States Steel Corp. v. Multistate Tax Comm'n, 434 U.S. 452, 471 (1978). In their seminal article on the history of interstate compacts, Professors Frankfurther and Landis explained the rationale of the Framers in requiring congressional consent:

> [T]he Constitution plainly had two very practical objectives in conditioning agreement by States upon consent of Congress. For only Congress is the appropriate organ for determining what arrangements between States might fall within the prohibited class of "Treaty, Alliance, or Confederation" and what arrangements come within the permissive class of "Agreement or Compact." But even the permissive agreements may affect the interests of States other than those parties to the agreement; the national, and not merely a regional, interest may be involved. Therefore, Congress must exercise national supervision through its power to grant or withhold consent, or to grant it under appropriate conditions. The framers thus astutely created a mechanism of legal control over affairs that are projected beyond State lines and yet may not call for, nor be capable of, national

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*/ See generally Petty v. Tennessee-Missouri Comm'n, 359 U.S. 295, 279 & n.5 (1959); League to Save Lake Tahoe v. Tahoe Regional Planning Agency, 507 F.2d 517, 523-24 (9th Cir. 1974), cert. denied 420 U.S. 974 (1975); Frankfurter and Landis, "The Compact Clause of the Constitution -- A Study in Interstate Adjustments," 34 Yale Law J. 685, 693-95 (1925).

> treatment. They allowed interstate adjustments but duly safeguarded the national interest.

Frankfurter and Landis, "The Compact Clause of the Constitution -- A Study in Interstate Adjustments," 34 Yale Law J. 685, 695 (1925). More recently, Justice White has emphasized that the role of Congress is to give its political judgment:

> Is the agreement likely to interfere with federal activity in the area, is it likely to disadvantage other States to an important extent, is it a matter that would better be left untouched by state and federal regulation?

United States Steel Corp. v. Multistate Tax Comm'n, 434 U.S. at 485 (White, J., dissenting).

Thus, the primary responsibility of Congress in giving its consent to interstate compacts is to ensure that the compacts do not intrude unduly upon national sovereignty and national interests. It is of course not inappropriate for Congress also to consider the possibility that implementation of particular compacts may give rise to difficult legal questions and to time-consuming litigation. Our intent in raising the issues we discussed in our correspondence last session was to enable Congress and the interested states to consider fully problems that might arise in the implementation and enforcement of the compacts. As lawyers, we cannot ignore these issues, nor do we think it appropriate for Congress to ignore them. However, with the exception of the Buckley v. Valeo issue, we did not intend to suggest in that correspondence that Congress could not, or should not, approve the compacts in their current form. At the time we identified the possible Buckley issue, we were not aware that each party state had enacted, or would enact, the text of its compact as part of the state's substantive law. That being the case, we believe that implementation and enforcement of the compacts should be viewed as a matter of state, rather than federal, substantive law, and therefore Buckley v. Valeo does not present a constitutional obstacle to congressional ratification of the compact.

We are also satisfied that the other issues we raised -- the extent to which the states can be insulated from liability for constitutional torts committed by the commissions, the substantive and procedural standards by which a court would judge actions taken pursuant to the compacts, and the possibility that Article III of the Constitution may impose some outside limit on the jurisdiction of the federal courts to hear cases arguably arising under the compacts -- are to a large extent inherent in the nature of interstate compacts, and can properly be resolved only through the courts, on the basis of particular facts. As Justice Frankfurter pointed out in 1951, "[a] compact is after all a legal document. Though the circumstances of its drafting are likely to assure great care and deliberation, all avoidance of disputes as to scope and meaning is not within human gift." West Virginia ex rel Dyer v. Sims, 341 U.S. 22, 28-29 (1951).

We do not believe that any of the issues we have identified as possibly engendering future litigation would threaten the validity of the compacts themselves or the obligations and rights of the party states. For example, even if a federal court were to conclude that a particular suit did not fall within its Article III jurisdiction (a result we think highly unlikely for most types of litigation that would arise under the compacts), the result would be only that the suit would have to be brought in the state courts -- a result that might trouble some of the litigants, but that we doubt would undermine the effectiveness of the compact itself.

Although we hope you will consider these legal issues and that the states will think about the possible litigation that may lie down the road, we would not want our comments to have a disproportionate impact on the critical judgments that Congress must make in determining whether to grant its consent to these compacts.

I will now be glad to answer any questions you may have.

U.S. Department of Justice

Office of Legislative and Intergovernmental Affairs

Office of the Assistant Attorney General

Washington, D.C. 20530

19 SEP 1984

Honorable Strom Thurmond
Chairman
Committee on the Judiciary
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

This is in response to your request for the views of the Department of Justice on four bills that would give congressional consent to interstate compacts dealing with the management and disposal of low-level radioactive wastes: S. 247, which would ratify the Northwest Interstate Compact on Low-Level Radioactive Waste Management; S. 1991, which would ratify the Rocky Mountain Low-Level Radioactive Waste Compact; S. 1581, which would ratify the Central Interstate Low-Level Radioactive Waste Compact; and S. 1749, which would ratify the Southeast Interstate Low-Level Radioactive Waste Management Compact. Each of these compacts would impose some obligation on party states to cooperate or participate in siting and development of regional centers to treat and dispose of low-level radioactive wastes, and would entitle those states to have low-level radioactive wastes generated within their borders managed at those regional centers. Each would also establish a board or commission, consisting of appointed members from each party state, that would have some authority to select sites for regional centers, to approve the application of non-party states for membership in the compact, and to approve the export and import of low-level radioactive wastes, otherwise prohibited by the terms of the compact. 1/ Several provisions of these bills raise complex

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1/ The Northwest Interstate Compact (S. 247) would establish a committee whose functions and authority would be much narrower than those of the administrative bodies established by the other three compacts. Because of the more limited scope of that committee's authority, the Northwest Interstate Compact does not necessarily raise issues of a constitutional dimension. Accordingly, our comments here apply primarily to the other three compacts, now pending congressional ratification in S. 1991, S. 1581, and S. 1749.

constitutional issues. We recommend that the bills not be enacted this session and that they be considered next Congress so as to afford the Administration and Congress additional opportunity to study these issues. Set forth below are the issues we have identified thus far which we believe merit additional analysis.

The Rocky Mountain, Central, and Southeast compacts are somewhat similar in the types of obligations imposed and the establishment of an administrative board or commission to implement their provisions, but they differ in many substantive and procedural respects. As we outline below, several of their provisions raise difficult and, we believe, largely unprecedented constitutional issues, particularly with respect to the role of the federal judiciary in enforcing and implementing the compacts, the status of the commissions or boards established, and the authority given those agencies to impose sanctions for violation of the terms of the compacts. These issues are extraordinarily difficult to analyze from a constitutional perspective, and we have not reached any definitive legal conclusions with respect to the appropriate legal role for congressional approval of these compacts.

The Compact Clause of the Constitution, Art. 1, § 10, cl. 3, makes congressional assent a prerequisite to performance by any two or more states of "any Agreement or Compact . . . ." that enhances the political power of the several states in a way that may threaten the supremacy of the United States. See United States Steel Corp. v. Multistate Tax Comm., 98 S. Ct. 799, 812-13 (1978). This Clause has been viewed historically as a limitation on state sovereignty. Thus, in Rhode Island v. Massachusetts, 37 U.S. 657, 724 (1838), the Supreme Court stated:

> If congress consented, then the states were in this respect restored to their original inherent sovereignty; such consent being the sole limitation imposed by the constitution, when given, left the States as they were before.

An interstate compact that has received congressional ratification necessarily implicates interests of the federal government. The Supreme Court has recognized, in cases involving particular interstate compacts, that such compacts may be enforced as federal law, 2/ and that construction of the terms of the compact may present a federal question for purposes of the Court's certiorari jurisdiction to review

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2/ See, e.g., Virginia v. West Virginia, 246 U.S. 565, 601 (1918).

judgments where "any title, right, privilege or immunity is specially set up or claimed under the Constitution, treaties or statutes of . . . the United States." 28 U.S.C. § 1257(3). 3/ Thus, compacts may give rise to and involve legal issues under both state and federal law, a situation that itself may present unique questions under the Constitution. We believe such questions are presented by the compacts now before your Committee.

The first such issue is the enforceability of these compacts through the federal courts. As we noted above, the Supreme Court has stated on several occasions that the construction of interstate compacts is a matter of federal law. At least one court of appeals has interpreted such statements to mean that the federal district courts have jurisdiction under 28 U.S.C. § 1331 to hear actions involving the construction of the nature and scope of obligations set forth in an interstate compact. See League to Save Lake Tahoe v. Tahoe Regional Planning Agency, 507 F.2d 517, 522 (9th Cir. 1974), cert. denied 420 U.S. 974 (1975). We are not confident, however, that this rationale would necessarily support a provision for judicial review of all "final decisions" of an interstate commission, such as would be provided in the Central Interstate Compact. Article IV of that Compact provides that:

> Any person or party state aggrieved by a final decision of the Commission may obtain judicial review of such decisions in the United States District Court in the District wherein the Commission maintains its headquarters by filing in such court a petition for review within 60 days after the Commission's final decision.

3/ See Petty v. Tennessee-Missouri Bridge Comm., 359 U.S. 275, 279-80 (1959); Dyer v. Sims, 341 U.S. 22 (1951); Delaware River Comm. v. Colburn, 310 U.S. 419 (1940); see generally Texas v. New Mexico, ___ U.S. ___ (June 17, 1983). If a compact presents a federal question for purposes of the Supreme Court's certiorari jurisdiction, it is, of course, a fortiori that the compact would present a federal question for purposes of Article III jurisdiction generally.

While we can conceive of some decisions by the Commission that would require a construction of the terms of the compact and therefore may present a federal question, we are not confident that every decision made by the Commission would raise such a question and therefore fall within the jurisdiction that may properly be assigned to the federal courts under Article III. Further, we are troubled that the mechanism by which jurisdiction would be conferred on the federal courts is by agreement between the states, albeit subject to congressional ratification. The Supreme Court has not articulated precise limits on the constitutionally permissible scope of interstate compacts, but it seems to us that the conferring of jurisdiction on the federal courts -- a function that falls squarely within the legislative authority of Congress -- may be outside those limits.

The problem entailed in giving the federal district courts broad review authority is compounded by the lack of any substantive standards to guide the courts' review. Even assuming that a federal district court could be assigned jurisdiction over an action brought to challenge a final decision of the Commission, there would appear to be no basis in the compact or, as far as we are aware, in state or federal law, upon which the court could evaluate, as a matter of substance, the lawfulness of the commission's actions. Nor would there appear to be any readily discernible standard of review to be applied by the district courts in such cases.

In apparent contrast to the provision of the Central Interstate Compact conferring jurisdiction on the federal courts, the Southeast Compact provides that, "[r]estrictions of waste management of regional facilities pursuant to [the compact] shall be enforceable as a matter of state law." Art. 6. The meaning of this provision is not entirely clear. It could be read to mean that questions involving the obligations and restrictions imposed by the compact may be enforced only through state courts, presumably based on state law. The compact does not, however, identify the applicable state law, or clearly place jurisdiction to enforce the compact in either the state or federal courts. At a minimum, we believe the intent and import of this provision would have to be clarified before we could analyze fully its legal and policy implications.

Second, we have concerns about the effect and enforceability of the statement in each of the compacts providing, in similar terms, that the commission or board created by the compact will be a legal entity distinct from the party states, and that the states will not be liable for any judgments or liability of that agency. It seems to us that this provision would raise difficult constitutional questions, because its import would appear to be that the entity, although created by the states, would be a private party for purposes of liability under the Constitution. Would this mean, for example, that the board or commission could not be liable for a denial of due process or a taking under the Fourteenth Amendment, even though it would be exercising authorities of the several states? We note that the Ninth Circuit has held that a similar body is an "agency of the contracting states," because otherwise it "would be unreasonable to allow states to avoid the constraints imposed by the Fourteenth Amendment simply by joining forces with each other. Such an aggregation of state power makes the need for those constraints even more pressing." Jacobson v. Tahoe Regional Planning Agency, 566 F.2d 1353, 1358 (9th Cir. 1977), aff'd in part and rev'd in part on other grounds, 440 U.S. 391 (1978). We therefore have doubts whether the states could agree, by fiat, to remove themselves from potential liability that might arise under applicable constitutional provisions from the operation of the compact.

Third, we believe the authority given to the commissions or boards created by these compacts to enforce obligations imposed under the compact by instituting civil actions for injunctive or other relief and to impose penalties and other sanctions may raise a constitutional issue. We are particularly concerned about the authority that would be given to the commission created by the Rocky Mountain Compact to assess civil penalties against persons who dispose of low-level radioactive wastes in contravention of the terms of the compact. It is not unprecedented for a state or federal administrative agency to be given authority to enforce statutory obligations through civil actions for injunctive and declaratory relief, and to assess civil penalties under the terms of applicable state or federal law. However, the existence of that authority could give rise to an unintended constitutional problem. To the extent that the commission could be considered to have responsibility for enforcing "federal law" in the assessment of federally-authorized civil penalties and in the institution of enforcement actions, the commission begins to resemble, at least in practical terms, a federal agency. In Buckley v. Valeo, 424 U.S. 1, 126 (1976), the Supreme Court noted that similar wide-ranging enforcement powers given to the Federal Election Commission constituted "executive" functions that could be performed only by "officers of the United States," appointed by the President or the head of a federal executive department in conformance to the Appointments Clause of the Constitution. 424 U.S. at 141.

We are concerned, therefore, that given the authority of the commissions to assess civil penalties and to impose other sanctions, and their authority to enforce those penalties and sanctions through the federal courts, 4/ the compacts could possibly be challenged on the basis that such authority may be exercised only by "officers of the United States." It may be that the states intend only that the commissions exercise such authority by virtue of appropriate delegations of state law, and only through the state courts. Such intent, however, is not clear on the face of the compacts. Moreover, as we discussed above, it is not entirely clear whether, or to what extent, the states can by agreement make the compact enforceable only in the state or federal system.

Without considerable additional analysis of the constitutional issues raised by these compacts, we cannot state that those issues could be resolved merely by conditioning congressional consent to the compacts as they now stand. We would of course be glad to analyze these issues further and to provide you with more definitive views should you feel our views would facilitate congressional review of these compacts.

The Office of Management and Budget has advised this Department that there is no objection to submission of this report from the standpoint of the Administration's program.

Robert A. McConnell

Robert A. McConnell
Assistant Attorney General
Office of Legislative and
Intergovernmental Affairs

4/ The Rocky Mountain Compact, for example, provides generally that the commission could enforce an assessment of such penalties in "any court of general jurisdiction within the region where necessary jurisdiction is obtained . . . ."

U.S. Department of Justice

Office of Legislative and Intergovernmental Affairs

Office of the Assistant Attorney General *Washington, D.C. 20530*

05 OCT 1984

Honorable Strom Thurmond
Chairman
Committee on the Judiciary
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

On September 19, 1984, we wrote to you expressing this Department's preliminary concerns about several legal issues raised by S. 247, S. 1991, S. 1581, and S. 1749, four bills now pending before your Committee which would, if enacted, give congressional consent to certain interstate compacts dealing with the management and disposal of low-level radioactive wastes. Representatives of this Department have since met with committee staff to discuss these issues and to obtain further information about the background and intended effect of these interstate compacts. Based on representations made to us during those discussions, we are now satisfied that there is no constitutional impediment to congressional approval of the compacts in their existing form. We still believe that some of the compacts contain provisions that could engender what may prove to be nettlesome litigation once the compacts are approved and implemented, particularly with respect to the substantive and procedural law that will govern actions taken by the various compact commissions. We take no position on whether the potential for such litigation should delay congressional approval of the compacts, although we urge Congress and the states involved to review those issues to determine whether the existing ambiguities could be clarified in the consent language of these bills or in accompanying legislative history.

The one constitutional problem identified in our letter that would be a barrier to congressional approval of these compacts is the possibility that members of the various commissions would be considered to be "officers of the United States" under *Buckley* v. *Valeo*, 424 U.S. 1, 126, 141 (1976), and therefore constitutionally could be appointed only by the President or the Head of a Department in conformance to the Appointments Clause of the Constitution. As discussed in our letter, the *Buckley* problem would arise if the commissions would be considered to have responsibility for enforcing "federal law" by virtue of congressional ratification of certain aspects of the interstate compacts. We now understand that each party state has enacted, or will enact, the text of each compact as part of its substantive law. Assuming this to be the case, we believe that the enforcement and regulatory authority of the commissions would appropriately be viewed as arising under *state*, rather than *federal*, substantive law. Under these circumstances, no *Buckley* problem would arise.

The issue identified in our letter regarding the enforceability of the compacts in the federal and state courts stems primarily from the somewhat anomalous status of commissions created by interstate compacts, which are neither clearly federal nor clearly state agencies for all purposes, and uncertainty as to what substantive and procedural law will apply to actions taken by those commissions and to any judicial review that may be had with respect to those actions. Our purpose in raising that issue was to enable Congress and the states involved to consider fully problems that might arise in implementation and enforcement of the compacts, in order that a fully informed judgment can be reached as to whether the compacts should be approved in their current forms. We do not believe, however, that this issue precludes congressional approval of these compacts.

We have no doubt that Congress has the constitutional authority to prescribe the law that would govern the actions of these interstate commissions, either by reference to existing state or federal substantive and procedural law or by ratifying standards set forth in the compacts themselves. In addition, we believe Congress can provide for review of decisions or actions by the commissions or of other claims arising under the compacts in the state courts, or in federal courts to the extent consistent with Article III. The root of the problem discussed in our letter is that some of the compacts do not contain legal standards governing actions taken by the commissions or clearly incorporate by reference any other body of law, and do not provide concrete guidance as to how rights and obligations arising under the compact are to be enforced. We can anticipate, therefore, that affected persons might have a basis upon which to challenge implementation or enforcement of the compacts or, more specifically, actions taken by the various commissions in the federal or state courts.

The likelihood of such challenges and the attendant delay and uncertainty they would create could possibly be minimized by clarifying, either in the consent language or in legislative history, what standards are to be applicable and how the compacts will be enforced. We are not in a position to determine the underlying intent or expectations of the participating states in drafting these compacts. In addition, the vesting of jurisdiction in the federal courts and the designation of a body of substantive or procedural law to apply to actions taken pursuant to the compacts raise policy considerations for Congress to address. We suggest that your staff may wish to explore further with the concerned states how those states contemplate that the compacts will be implemented and enforced, and whether there is in fact a need to revise any of the compacts in light of these considerations. We will, of course, be glad to answer any questions your staff may identify in pursuing that analysis.

Our third point, respecting provisions purporting to insulate states from liability for actions taken by the interstate commissions, involves only the power of the states to remove themselves from liability for constitutional torts through this mechanism. Again, this issue is one that may arise in litigation under the compacts, but does not directly affect the authority of Congress to approve the compacts as written. We did want Congress to be aware that the federal government would not assume responsibility for the constitutional torts, if any, committed by these commissions and that therefore there is a likelihood that the courts would hold the states themselves to be liable in otherwise appropriate litigation.

We trust that this further analysis will be helpful to you in your Committee's consideration of the four bills we have reviewed. We will be glad to discuss these matters further if you feel such discussion will be useful.

Sincerely,
(Signed) Robert A. McConnell

Robert A. McConnell
Assistant Attorney General

U.S. Department of Justice

Office of Legislative and Intergovernmental Affairs

Office of the Assistant Attorney General

Washington, D.C. 20530

May 20, 1985

Honorable Strom Thurmond
Chairman
Committee on the Judiciary
United States Senate
Washington, D.C. 20510

Dear Chairman Thurmond:

on March 8, 1985, Ralph W. Tarr, Acting Assistant Attorney General, Office of Legal Counsel, testified before your committee on the subject of interstate compacts on the management of low-level radioactive waste. At the conclusion of his testimony you provided Mr. Tarr with several questions to be answered for the record. I am pleased to provide you with the answers below.

Q. You briefly alluded to the so-called "Buckley v. Valeo issue" in your statement -- an issue which the Justice Department discussed in detail in its two analysis letters of last year. As I understand the Justice Department's current view of that issue, you are now satisfied that it does not present a constitutional obstacle to congressional approval of these compacts. Is that correct?

A. Yes, that is correct. At the time the Department of Justice first reviewed the interstate compacts last year, we were not aware that each party state had enacted, or would enact, the text of its compact as part of the state's substantive law. We were therefore concerned that the compacts would be enacted solely as a matter of federal statutory law, by virtue of congressional consent to the texts of the compact, and that the members of the various boards or commissions could therefore be considered to have responsibility for "exercising significant authority pursuant to the laws of the United States." See Buckley v. Valeo, 424 U.S. 1, 126 (1976). Subsequently, we were informed that the compacts had been or would be enacted as a part of the substantive law of each participating state. We are therefore satisfied that implementation and enforcement of the compacts should be viewed as a matter of state, rather than federal, substantive law, and that Buckley v. Valeo does not present a constitutional obstacle to congressional ratification of the compacts.

Q. With respect to the constitutional tort issue, would you furnish for the record a description of how that question has generally been treated by the courts when considering interstate compact-related issues?

A. In the first letter sent by the Department of Justice to the Committee last year on the subject of the compacts, we raised the general issue whether statements in the compacts to the effect that the commissions will be legal entities distinct from the party states, and that the states will not be liable for any judgments or liability of the commissions, would be effective to insulate the states from liability for constitutional violations, if that is indeed one of the purposes of such statements. We raised this issue because the courts have often considered agencies or entities created by interstate compacts to be extensions or alter egos of the involved states. In the landmark case of Petty v. Tennessee-Missouri Bridge Comm'n, 359 U.S. 275 (1959), for example, the Supreme Court assumed that the wrongful death action brought against the agency involved "must be considered as one against the States since this bi-state corporation is a joint or common agency of Tennessee and Missouri." 359 U.S. at 279. The question the Court considered, therefore, was "whether Tennessee and Missouri [the member states] have waived their immunity under the facts of this case." Id. at 277.

The underlying rationale of Petty, which we believe generally consistent with the interstate compact clause, is that such agencies are exercising some aspect of state sovereignty, rather than acting as purely private parties. This rationale was outlined succinctly in Jacobson v. Tahoe Regional Planning Agency, 566 F.2d 1353 (9th Cir. 1977), a case in which constitutionally-based claims were brought against an agency created by an interstate compact:

> The Compact evidences a delegation to a separate legal entity of authority ordinarily residing in each of the two states. With Congress' constitutionally required approval, the TRPA exercises a species of state authority. In effect, the bi-state Authority serves as an agency of the participant states, exercising a specially aggregated slice of state power.

566 F.2d at 1359 (footnote omitted).

We are not aware, however, of any case that construes an express provision of an interstate compact purporting to insulate the participating states from liability for actions taken by an agency created by the compact. It seems to us that, to the extent state or federal statutes may impose liability on the states or their agencies, such liability could be waived by action of the states and of Congress. However, we doubt that constitutionally-based liability could also be waived. In Jacobson v. Tahoe Regional Planning Agency, the court noted that:

> We think a cause of action rooted in the Fourteenth Amendment may be appropriate since the TRPA is, in effect, an agency of the contracting states. It would be unreasonable to allow states to avoid the constraints imposed by the Fourteenth Amendment simply by joining forces with each other. Such an aggregation of state power makes the need for those constraints even more pressing.

566 F.2d at 1358. We believe that the existence of a specific statement in the interstate compact disclaiming liability on behalf of the states could similarly be found to have no effect with respect to the participating states' liability for constitutional violations.

This conclusion, however, does not mean that Congress could not or should not approve compacts that include statements disavowing state liability, merely because those statements may not be given effect in some circumstances. As our October 5, 1984 letter points out, the issue may arise in litigation under the compacts, but does not directly affect the authority of Congress to approve the compacts as written.

Q. Does the Department believe any consent language is needed to clarify that issue?

A. The Department of Justice does not believe consent language is necessary to clarify the applicability of the statements in the interstate compacts with respect to the status of the various interstate commissions. The issue whether such statements are effective to insulate the states in any particular factual situations will be determined with respect to the immediate facts and to the need to provide relief for constitutional violations. Consent language, although perhaps useful in some circumstances to guide a court as to Congress's view of the legal force of such statements, would probably not be considered determinative in any such case.

It might be appropriate, however, for Congress to look at the statutory implications of making the compact-created commissions separate legal entities from the participating states. It may be that there are federal statutes that would be covered that Congress determines should nonetheless apply to the actions of the commissions. If that is the case, Congress could appropriately condition its consent to the compacts on the continued applicability of such statutes.

Q. In a similar vein, would you briefly describe how, in compact-related cases, the courts have generally handled the legal issues of:

a. standing to sue,

b. legal standards governing compact commission actions, particularly in cases where the compact language does not specify any standards, and,

c. standard of review?

With respect to any of these several matters, does the Department feel clarifying consent language is necessary or advisable?

A. It is difficult to generalize as to how the courts have treated questions of standing, substantive legal standards, and standard of review in cases that involve the application or interpretation of interstate compacts, because each case turns on its unique facts and circumstances. We can say generally, however, that the courts start from the premise that application and interpretation of interstate compacts involve a question of "federal law," in that the federal courts are not bound by state court determinations with respect to the applicable law. This principle was articulated clearly in Dyer v. Sims, 341 U.S. 22 (1951), a case that involved the application of state laws to obligations undertaken by a state under an interstate compact:

> Just as this Court has power to settle disputes between States where there is no compact, it must have final power to pass upon the meaning and validity of compacts . . . . To determine the nature and scope of obligations as between States, whether they arise through the legislative

> means of compact or the "federal common law" governing interstate controversies, is the function and duty of the Supreme Court of the Nation. Of course every deference will be shown to what the highest court of a State deems to be the law and policy of its State, particularly when recondite or unique features of local law are urged. Deference is one thing; submission to a State's own determination of whether it has undertaken an obligation, what the obligation is, and whether it conflicts with a disability of the State to undertake it is quite another.

341 U.S. at 28 (citation omitted). See also Cuyler v. Adams, 449 U.S. 433, 438 (1981) (Supreme Court not bound by state court result because compact is a federal law subject to federal construction); Petty v. Tennessee Missouri Comm'n, 359 U.S. 275, 280 (1959).

In interpreting the effect and force of interstate compacts, the federal courts have thus felt unconstrained to find the applicable substantive and procedural standards in a number of sources. These include the language of the compact itself, to the extent that language sets up specific rights, duties, obligations, or responsibilities; 1/ the "legislative history" of the interstate negotiations that led to the compacts; 2/ specific consent language imposed by Congress and the legislative history behind that language; 3/ and other state or federal laws 4/ or constitutional requirements. 5/

1/ See, e.g., Delaware River Joint Toll Bridge Comm'n v. Colburn, 310 U.S. 419 (1940); Cuyler v. Adams, 449 U.S. 433 (1981).

2/ See, e.g., Cuyler v. Adams, 449 U.S. 433 (1981); Texas v. New Mexico, 103 S. Ct. 2558 (1983).

3/ See, e.g., Petty v. Tennessee-Missouri Comm'n, 359 U.S. 275 (1959).

4/ See, e.g., Dyer v. Sims, 341 U.S. 22 (1951); Petty v. Tennessee-Missouri Comm'n, 359 U.S. 275 (1959); Delaware River Joint Toll Bridge Comm'n v. Colburn, 310 U.S. 419 (1940).

5/ See, e.g., Dyer v. Sims, 341 U.S. 22 (1951); Petty v. Tennessee-Missouri Comm'n, 359 U.S. 275 (1959); Jacobson v. Tahoe Regional Planning Agency, 566 F.2d 1353 (9th Cir. 1977).

Ideally, of course, it would be preferable to embody definitive, comprehensive standards in the compacts themselves, both to circumscribe and define the commission's authority and procedures and to facilitate court review. However, as the drafters of the compacts no doubt recognized, accomplishing that goal is virtually impossible, as many of the problems and questions that may arise in litigation cannot be foreseen in advance. By and large the drafters have done what they can to negotiate and describe the substantive standards that will guide the decisions of the commissions. We understand further that most, if not all, of the commissions have adopted their own internal procedures to provide for public input and preserve fairness in the decisionmaking process.

Any case that actually goes to litigation is bound to raise difficult issues about what particular substantive or procedural standards apply to a commission's decision, and whether the commission met those standards. The issues that might be raised under the low-level radioactive waste compacts would probably not differ significantly from similar issues that have arisen in litigation over other interstate compacts. We assume that, should a question arise in litigation concerning the interpretation or application of one of the interstate compacts dealing with low-level radioactive waste, the courts would look to the language of the compact, the intent of the negotiating states, the intent of Congress in ratifying the compacts, and any other applicable state or federal statutes and constitutional provisions. We do not believe that any of these issues -- or other equally complex issues that creative lawyers can develop -- is a substantial impediment to congressional approval of the compacts or implementation by the states. The litigation may be nettlesome, but to a certain extent unavoidable. Ultimately, these are the types of issues that can be resolved only through the courts, and it is appropriate that they be left for judicial resolution.

On the whole, we do not recommend that consent language be added to address the issues of standing, substantive legal standards, and standard of review. It is not clear that Congress could do much to ameliorate or avoid potential litigation issues from arising, because the scope of any problem and its resolution will depend very much on the specific facts involved -- facts that only a court will be competent to evaluate at that time. Second, even to the extent Congress could come up with some "quick fix" solutions, any significant attempt to alter the terms negotiated by the states would be, in a sense, undercutting one of the basic purposes of the Interstate Compact Clause -- the flexibility to let the states develop their own regional solutions to difficult regulatory problems. Finally, we think there may be some risk involved if Congress were to try to legislate, by means of the consent language, substantive or procedural standards and obligations under the compacts. The more such action resembles legislating by Congress of the actual substantive obligations arising under the compacts, the closer we might come to a Buckley v. Valeo problem.

We do not want to suggest that there is no room at all for Congress to prescribe conditions to its consent. Obviously there is a significant role for Congress to play in protecting federal interests and the interests of other states. The framers intended for Congress to be the guardian of those interests, and therefore it would not be inappropriate for Congress to condition its consent on guarantees or provisions intended to ensure, for example, that the compact does not threaten substantial federal interests.

Q. What is your understanding of the state of the law with respect to the jurisdictional authority of the federal courts to entertain suits involving interstate compact issues which raise federal questions, consistent with Article III of the Constitution?

Does the Justice Department recommend any consent language to clarify or limit the jurisdictional authority of the federal courts to review compact issues?

A. The federal courts, unlike most state courts, are courts of limited jurisdiction, empowered to hear only those cases that fall within the constitutional definition of the judicial power in Article III 6/ and within a legislative

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6/ "The judicial Power shall extend to all Cases, in Law and Equity, arising under this Constitution, the Laws of the United States, and Treaties made, or which shall be made, under their Authority; -- to all Cases affecting Ambassadors, other public Ministers and Consuls; -- to all Cases of admirality and maritime jurisdiction; -- to Controversies to which the United States shall be a party; -- to Controversies between two or more States; between a State and Citizens of another State; -- between Citizens of the same State claiming Lands under Grants of different States, and between a State, or the Citizens thereof, and foreign States, Citizens or Subjects." Art. III, § 2.

grant of jurisdiction by Congress. 7/ See generally Wright, Law of Federal Courts (3d ed. 1976) at 17. In order to be heard in the federal courts, then, cases involving interstate compacts must fall within the limits of Article III and must meet one of the statutory prerequisites for federal jurisdiction set out in Title 28.

The Supreme Court has accepted certiorari jurisdiction to review state court decisions interpreting interstate compacts, under its grant of certiorari jurisdiction over cases in which the litigants claim a right under the United States Constitution, or any treaty, statute, or commission held or authority exercised under the United States (28 U.S.C. § 1257(3)). See Delaware River Joint Toll Bridge Comm'n v. Colburn, 310 U.S. 419, 427 (1940); Petty v. Tennessee-Missouri Bridge Commission, 359 U.S. 275 (1959). In Cuyler v. Adams, 449 U.S. 433 (1981), the Court outlined its reasoning in those cases:

> The Compact Clause of the United States Constitution, Art. 1, § 10, cl. 3, provides that "No State shall, without the Consent of the Congress, . . . enter into any Agreement or Compact with another State . . . ." Because congressional consent transforms an interstate compact within this Clause into a law of the United States, we have held that the construction of an interstate agreement sanctioned by Congress under the Compact Clause presents a federal question.

449 U.S. at 438 (citations omitted).

7/ The statutory basis for jurisdiction in the federal district courts is set forth in 28 U.S.C. §§ 1330 et seq. Section 1331, which would appear to be the most relevant jurisdictional grant, provides for jurisdiction over civil actions in excess of $10,000, which "arise[] under the Constitution, laws, or treaties of the United States." The jurisdiction of the Supreme Court is set forth in 28 U.S.C. §§ 1251 et seq. Under § 1257, the Supreme Court may review, by writ of certiorari, final judgments or decrees by state courts "where any title, right, privilege or immunity is specially set up or claimed under the Constitution, treaties or statutes of, or commission held or authority exercised under, the United States."

On the basis of the rationale in the Supreme Court's decisions accepting certiorari jurisdiction, the Ninth Circuit Court of Appeals has held that the federal district courts have original jurisdiction over suits arising out of interstate compacts under 28 U.S.C. § 1331(a) (n.7 *supra*). *League to Save Lake Tahoe* v. *Tahoe Regional Planning Agency*, 507 F.2d 517, 519 (9th Cir. 1974), *cert. denied*, 420 U.S. 974 (1975). The court reasoned that the Supreme Court's conclusion that such suits involve a "statute of the United States" for the purpose of certiorari jurisdiction under 28 U.S.C. § 1257 implies also that such suits arise under federal "law" for the purpose of § 1331(a) jurisdiction, and concluded therefore that the federal district courts have jurisdiction over suits that require the construction or application of an interstate compact.

We believe it is thus well-established that suits raising questions of interpretation and application of interstate compacts fall within the constitutional and statutory jurisdiction of the federal courts, and therefore Congress may consent, if it wishes, to exclusive or concurrent jurisdiction over such suits in the federal courts. We caution, however, that the suits considered by the Supreme Court and the lower federal courts have squarely raised questions requiring an interpetation of rights, duties, or obligations assumed by the parties to the compacts or arising from the compact itself. Theoretically, it is possible that there is an outside limit to a litigant's ability to invoke federal court jurisdiction, if the suit does not require interpretation of the compact or of any duties, rights, or responsibilities arising under the compact. Although we are not aware of any cases that have raised this issue, it is possible that causes of action founded solely on state law, such as breach of contract or negligence, would not raise a federal question and therefore not fall within the constitutional or statutory jurisdiction of the federal courts.

We have therefore raised the possibility that in rare cases the federal courts might refuse to hear suits arising under interstate compacts, even if the compact provides for such jurisdiction. Because the Supreme Court has not had occasion to rule on the basis for federal jurisdiction in any case that stretches the limits of Article III to that extent, we cannot conclude definitively how the courts would decide the jurisdictional issue. In any event, we believe such cases would be few and far between, and therefore that the possibility we have discussed should not impede congressional ratification of the compacts.

We do not recommend any consent language to clarify this issue. We believe that any conclusion that a court might reach with respect to whether a particular case falls within the constitutional and statutory jurisdiction of the federal courts would depend on the facts of that case, and would not be affected by any gloss that Congress might add in the consent language reflecting its understanding of applicable precedents.

Q. The essence of the Department's testimony is that there are a number of potentially troublesome legal issues surrounding these compacts. These issues, however, are inherent in the nature of interstate compacts, and none of them, in the Department's current view, constitute a basis for withholding congressional approval of these compacts in their current form. Is that the gist of the testimony?

A. Yes.

We trust this further analysis has been useful to you in your consideration of the difficult issues posed by the interstate compacts on disposal of low-level radioactive waste.

The Office of Management and Budget has advised this Department that there is no objection to submission of this report from the standpoint of the Administration's program.

Sincerely,

Phillip D. Brady
Acting Assistant Attorney
General

The CHAIRMAN. Our next witness is Hon. James W. Vaughan, Jr., Acting Assistant Secretary for Nuclear Energy, U.S. Department of Energy.

Mr. Vaughan, come around and have a seat. Mr. Vaughan, if it meets your approval, we will put your entire statement in the record, and if you will give us the thrust of your statement in a few words?

STATEMENT OF HON. JAMES W. VAUGHAN, JR., ACTING ASSISTANT SECRETARY FOR NUCLEAR ENERGY, U.S. DEPARTMENT OF ENERGY, WASHINGTON, DC

Mr. VAUGHAN. All right.

Thank you very much, Mr. Chairman.

The CHAIRMAN. Is that agreeable to you, to do that?

Mr. VAUGHAN. That is quite agreeable with me, principally because at the request of your staff, a portion of my statement simply reviews the current status and activity which the Department of Energy has been supporting over the last several years in terms of technical assistance to the States in forming compacts and helping with criteria for disposal site locations. We stand ready to continue to provide technical assistance, within the limits of our authority.

We are well aware that in the House, before Congressman Udall's committee, there is a series of amendments to the Low-Level Radioactive Waste Policy Act, 1980, which would extend the dates for access to deposit sites by the regions who do not yet have host sites identified. And, while the Department supports that objective, we believe very strongly, as supported in testimony to that committee, that there should be strong forcing functions to enable those States to get on with the business of identifying sites, and reaching compacts at the earliest possible date, rather than simply standing aside and taking advantage of a 7-year hiatus.

With that behind us, let me make several general comments on the proposed compacts that are before you today. It is our understanding that it was the intent of Congress not to change the general approach to low-level radioactivity waste management that has operated successfully for the past 20 years.

Some of the things being considered might change pieces of that. The Department strongly supports the position that changes in the current system be minimized. Where there are changes to the present system that are necessary, they ought to be consistent with the original intent of the act; namely, that all States should share the responsibility for the disposal of low-level waste, rather than relying on existing facilities in the States of South Carolina, Washington, and Nevada. And in doing that, consideration should be given to the diverse concerns of Federal, regional, State, local, and private interests.

Third, if Congress does grant to any regional compact the authority to exclude "out of region" waste before all regions or States have disposal facilities available, it is essential that provisions be made for those States without available disposal sites to manage their waste safely on an interim basis.

Fourth, there is an item that does warrant some special attention. As you are aware, there is a wide spectrum of facilities located throughout the country which perform work in support of the national defense and public health that generate low-level radioactive waste in the process. These facilities include both commercial and Federal activities. They have historically used commercial disposal sites for their low-level waste, and so, as this waste compacting process evolves, it is important to understand that any decisions we make that would restrict the ability of those facilities that are in the national defense or public health interests to dispose of their waste could adversely affect the operations of those facilities. We need to be very careful in that regard.

The Department of Defense, for example, testified before this committee in January 1984 and expressed some of their concerns in this area.

Last, we believe that the 1986 date for excluding waste from nonmember States should not be extended without establishing measures that would strongly encourage continued progress toward the development of new facilities in regions and States without ready access to disposal sites.

It would probably be inadvisable from technical, financial, environmental, and policy standpoints if we just let this low-level waste pile up in interim storage places, waiting for something more to happen.

Now, let me very briefly summarize our views on the specific Southeast, Rocky Mountain, and Northwest compacts that are currently before this committee for consent. As you know, we have previously provided specific comments for each of the proposed compacts in our testimony at hearings in 1982 and 1983. With your permission, I will provide an updated, detailed set of our comments to this committee for the record.

The CHAIRMAN. Thank you very much.

[Information follows:]

DETAILED COMMENTS OFFERED
BY THE DEPARTMENT OF ENERGY
ON LANGUAGE PROVIDED IN THE NORTHWEST,
SOUTHEAST, AND ROCKY MOUNTAIN COMPACTS

The Department of Energy offers the following detailed comments on the language submitted for consent to the Congress in the Northwest, Southeast, and Rocky Mountain Compacts. This submittal is in addition to those general comments the Department offered in testimony to the Senate Judiciary Committee on March 8, 1985, and are similar to those submitted previously in hearings held in 1982, 1983, and 1984.

Northwest Compact

The Northwest Compact, as expressed in S.356, was introduced on January 31, 1985. Several sections of its language are subjects for comment. First, Article II (2) contains a more restrictive limit than the 100 nanocuries per gram limit of transuranic contaminant proposed by the Nuclear Regulatory Commission, Environmental Protection Agency, and Department of Energy. The Department recommends that the section be changed to be consistent with the limits as stated in 10 CFR 61. Also, the Low-Level Radioactive Waste Policy Act excludes certain Federal facilities and certain Federally generated waste from the provisions of all regional compacts. The definition of the term "generator" as applied in the compact language needs to be clarified so that the compact does not apply to the Department of Energy. The provision in Section 2 directing the Nuclear Regulatory Commission (NRC) to require its licenses to comply with provisions of the compact is unnecessary, since we believe the intent of the Low-Level Radioactive Waste Policy Act was not to change the NRC's authority.

Article III of the proposed Northwest Compact allows for periodic unannounced inspections of generators by the States in which the generator is located, if low-level waste generated by them is shipped to the commercial low-level waste disposal site within the region. The Department of Defense ships low-level waste from Army, Navy, and Air Force operations to the commercial low-level waste disposal site in Washington. For national security reasons, the Department of Defense cannot permit unannounced inspection by State officials of its classified areas in these facilities.

In order to exclude the operation of Federal facilities from the provisions of the compact, the Department suggests the compact be amended by adding a provision that has been included in other low-level waste regional compacts and provides: "Nothing in this compact shall be construed to affect the generation or management of waste generated by the Federal Government or for Federal research and development activities." On another matter, we suggest additional words be added that provide: "A regional low-level radioactive waste disposal facility established under the Compact consented to by this Act shall accept Federal waste generated outside the region if the President's designee determines there is no disposal facility in operation in the region in which the waste is generated, and that immediate disposal of the waste is required for reasons of public safety or national security."

In our judgement, except for the issues noted above, the Northwest Compact will enhance enforcement of Federal regulations. All of the compact groups have expressed a strong desire to participate in some manner in the regulatory aspects of low-level waste management. This has engendered some confusion, but we believe this is being resolved with the Nuclear Regulatory Commission.

Southeast Compact

Turning now to S.44, the proposed bill for consent of the Southeast Compact, the Department offers a few points of commentary. We have noted previously that in general there needs to be some clarification of the definition of low-level waste among all the compacts. We have suggested that Congress, to assure a workable nationwide system, should adopt the definition used in the Nuclear Waste Policy Act of 1982 in congressional consent language for each compact. The definition of low-level waste in Article 2(6) of the Southeast Compact is almost the same as that used in the Nuclear Waste Policy Act of 1982 (NWPA), so a clarification of the definition in consent language using the NWPA definition would not materially change the Southeast Compact.

Again, because of the ambiguity in the Low-Level Waste Policy Act in defining "Federal Research and Development Activities," the question of how Federal low-level radioactive waste would be handled under the Southeast Compact needs clarification. Article 1 states that each State is responsible for providing for capacity for disposal of low-level radioactive waste generated within its borders, except for defense activities of the Federal Government. Article 6A(8) states that the Compact does not affect the generation, treatment, storage, or disposal of waste generated by the atomic energy defense activities of the Department of Energy or Federal research and development activities. Article 3(A) provides that all wastes generated within the borders of a party State shall have the right of access to the disposal facility. We support Congressional clarification of the compact language to continue normal procedure for disposal of Federally generated low-level waste at a commercially operated facility in the Southeast region. Additionally, we suggest the following be added to the compact consent language: "A regional low-level radioactive waste disposal facility established under the compact consented by by this Act shall accept Federal waste generated outside the region if the President's designee determines there is no disposal facility in operation in the region in which the waste is generated, and that immediate disposal of the waste is required for reasons of public safety or national security."

Article 5(B) of the Compact would grant the host State the right to terminate or limit access to the disposal facility if it determines that Congress has materially altered the conditions of the compact. Although in our opinion none of the conditions we have recommended would constitute a material alteration of the Compact, we do suggest that congressional consent of the Compact also nullify this section because: (1) it is inconsistent with the intent of the Low-Level Radioactive Waste Policy Act, which provides congressional authority to grant consent to regional compacts and to assure that workable provisions are incorporated into the regional compacts throughout the United States; and (2) enactment of this provision may allow the host State to unilaterally, and without regard to the impacts on other compact members and waste generators, close or limit access to the regional disposal facility. We offer this suggestion in the spirit of maintaining a successful, long-term nationwide interregional and State framework for low-level waste disposal.

We note that the Southeast Compact permits the imposition of a ban on the export of low-level radioactive waste outside the region after January 1, 1986. Allowance for export bans could stabilize the management of low-level radioactive waste within the region and add predictability to economic projections for regional disposal site operations. We do not oppose export bans as long as exceptions based on health and safety, economic, or management concerns can be granted. Article 4(L) of the Southeast Compact appears to allow for such exceptions.

We believe that congressional approval of the Southeast Compact would stimulate States outside this region to increase their efforts to develop a nationwide regional low-level radioactive waste management system; however, the Southeast Compact Commission should negotiate agreements with regions without disposal sites for some degree of continued use of the Southeast disposal facility, provided these regions are pursuing a "good faith" effort to provide for their own disposal site at the earliest possible time. Congressional consent should encourage the siteless regions to expedite "good faith" efforts to provide a disposal site.

Rocky Mountain

The last compact on which we would like to provide comments for Committee consideration is the compact for the Rocky Mountain region as proposed in S.442.

Again, as with the Northwest compact language, we have concerns about the Compact's definition of low-level radioactive waste (Article II(g)). It is not in accordance with the Low-Level Radioactive Waste Policy Act or the Nuclear Waste Policy Act of 1982. But most importantly, the definition would affect current practice for management and disposal of Federal waste, waste material containing transuranic elements, and the processing of certain ores and mineral-bearing materials. The definition is also different from that used in other aspects, thereby creating the potential for inconsistency for acceptance of waste and operation of facilities among regions.

Specifically, Articles I(a) and II(g) of the Compact exclude all waste generated as a result of defense activities of the Federal Government from the category of low-level waste for which member States are responsible, rather than just those defense activities of the Secretary of Energy as specified in the Act. Since Federal agencies, except the Department of Energy, routinely ship low-level waste to commercial facilities for disposal, the Rocky Mountain Compact's provisions for handling low-level radioactive waste generated by Federal agencies would alter current practices for management and disposal. Since the compact also excludes all Federal research and development waste, we support congressional clarification of the Compact language to provide for continued disposal of those Federally-generated low-level wastes currently handled by commercial facilities. Additionally, we suggest the following be added in the compact consent language: "A regional low-level radioactive waste disposal facility established under the compact consented to by this Act shall accept Federal waste generated outside the region if the President's designee determines there is no disposal facility in operation in the region in which the waste is generated, and that immediate disposal of the waste is required for reasons of public safety or national security."

Article III(f)(i) requires Compact party States to adopt and enforce procedures requiring low-level waste shipments, originating within its borders and destined for a regional facility, to conform to certain packaging and transportation requirements and regulations. This includes periodic inspection of waste packaging and transportation practices. The Committee should note that unless a State has executed an agreement with the U.S. Nuclear Regulatory Commission under Section 2741 of the Atomic Energy Act of 1954, as amended, it is preempted from conducting inspections of nuclear reactors and Federal facilities. The Nuclear Regulatory Commission has proposed a standard 2741 agreement which would permit State sponsored inspections at reactor sites, and with prior consent, at Federal installations, to determine compliance with Nuclear Regulatory Commission packaging and transportation regulations. We believe onsite inspection at Federal installations should be made on the basis of prior consent. Access to security areas or classified operations at the site of generation, or to classified information pertaining to the site and its work, should not be authorized. For such facilities, the inspection could take place at some intermediate location.

Article VIII(c) provides that the Compact shall take effect when it has been enacted by two eligible States, with the exception of subsections (b) and (c) of Article VII, which would not take effect prior to congressional consent to the Compact. A literal interpretation of Section 4(a)(2)(B) of the Act would lead to the conclusion that no Compact provisions could take effect prior to Congressional consent. We believe the consent provision was intended to apply only to those activities which do not increase the sovereign power in the States and encroach upon or interfere with the just supremacy of the Federal Government. Since Article VII, "Prohibited Acts and Penalties," could affect interstate commerce, it appears that, at a minimum, all of Article VII would not be effective until consented to by Congress.

Finally, the Compact recognizes amendments to the Atomic Energy Act only through 1978. The Atomic Energy Act has been amended several times since 1978 and would be further amended in the future. The reference to 1978 should, therefore, be eliminated. Also, the Rocky Mountain Compact is the only compact that would exclude wastes from mining, milling, smelting, or similar processing of ores and mineral bearing material, if such wastes were determined to be suitable for disposal as low-level waste. Enforcement of this provision could create a class of "orphaned" wastes, requiring the region to find some other suitable measure for handling and disposal.

The Department believes the inconsistencies contained in the Rocky Mountain Compact can be resolved in consent language.

Conclusion

In conclusion, with the resolution of the concerns we have noted in our comments, we would support the timely approval of all compacts now before Congress. Such approval would not only stimulate States outside these regions to increase their efforts to establish operating compacts and move forward with the critical task of developing new low-level waste disposal facilities, consent would also tend to discourage fragmentation of the other compact groups. Critical review and approval of these compacts will reaffirm the Congressional commitment to establishment of a workable nationwide system of regional low-level waste disposal facilities and could additionally reduce the potential for development of a larger number of disposal sites than would be needed to serve the national interest. The Department will provide specific proposed suggested changes to S.44, S.356, and S.442, respectively, in order to reflect the concerns that have been noted above.

Mr. VAUGHAN. The essence of our concerns regarding the compacts is that all compacts should be consistent in the definition of low-level waste in order to ensure a system of low-level waste disposal that will accommodate all such waste, including Federal agency waste currently being disposed in civilian sites.

We would recommend that, to ensure a workable nationwide system, Congress should adopt the definition of low-level waste used in the Nuclear Waste Policy Act of 1982 in the congressional-consent language for each compact.

Second, there is a term related to Federal research and development activities that appears today in the Low-Level Radioactive Waste Policy Act that needs to be defined, because it is being interpreted ambiguously. It is our intent that it be defined as to include all activities of the Secretary of Energy, other than those of the Secretary of Energy's atomic energy defense activities, which are already precisely defined in the Low-Level Radioactive Waste Policy Act (1980).

Third, we need to make sure that in the requirements for inspection at Federal facilities where classified work is performed, but where the waste ultimately goes to commercial burial grounds, that we have carefully thought out, and appropriately defined provisions that would not allow open access to those facilities, but, if necessary, would permit inspection of the package, or whatever is necessary, at some intermediate location.

We do support provisions that would permit a regional compact commission to restrict the export of the low-level radioactive waste generated within its own region. Our support is primarily based on economic considerations, but the authority of regional compact commissions to govern the transfer of waste among regions can help to stabilize the management of this waste within each region. It would also help us in our overall economic projection for regional disposal site development and operations, as well as interim waste storage requirements.

Let me conclude by saying that the Department of Energy does support strongly early congressional consent to regional compacts for management and disposal of low-level radioactive waste.

My comments today are intended to suggest refinements that could insure better workability, and more longevity of the final program which is forged by the States and Congress, and we stand ready to work with this committee to resolve any of the concerns that have been noted in our testimony.

I have with me today Mr. William R. Voigt, who is the Acting Director of our Office of Terminal Waste and Remedial Actions, which is the office in the Department that has provided technical support to the States. We would be pleased to answer any questions you may have, either orally, or we would be pleased to answer them for the record, in the interest of time.

The CHAIRMAN. Thank you.

One of the main components of low-level radioactive waste management is volume reduction. Would you comment on the potential for further volume reduction, considering present knowledge and technology?

Mr. VAUGHAN. I believe it would be fair to say that the technology is available to accomplish some degree of volume reduction. You may remember, Mr. Chairman, that in some of our prior discussions, when I was in the naval nuclear propulsion business for many years, we, in fact, ensured that our naval shipyards, performing work on naval nuclear powerplants, tried to take actions to reduce the volume of wastes that they were generating. And if you decide that you really need to do it, it is technically achieveable in many cases.

I think that it is not completely clear that the 40-percent reduction in waste being sent for disposal at current sites, that some have proposed, can be attained immediately, without some hardships, principally economic, to certain of the waste generators.

Obviously, if people are willing and we can sort out what the increased costs would be, I think it is clear that within a period of a few years we could clearly manage reductions in volumes of waste initially generated. I think it is also obvious in that regard that those waste generators that have the largest resources and the largest technical staffs would have the most flexibility to reduce their volumes.

The CHAIRMAN. Thank you.

There has been much discussion of a proposal that nuclear utilities store their low-level radioactive waste for a limited time, not to exceed 7 years, as part of an overall volume reduction plan.

What advantages, disadvantages or problems do you see in such a proposal?

Mr. VAUGHAN. Mr. Chairman, as I understand it, the utilities can store their own low-level waste under their existing operating licenses, for up to 5 years. You may want to ask the NRC representative for the specific number, because I am using that one from memory. I am well aware that some utilities have already planned to store their low-level waste, and that others do not have facilities for such storage.

So, again, it is a feasible thing to do in terms of the technology and the adequate protection of the health and safety of the public. But there would be questions of cost, licensing, capabilities to accommodate the wastes, and liabilities that would need to be sorted out in order for them to accomplish that.

It is my personal opinion that we are better off to go ahead with getting as many compacts, and as many sites approved and working, as soon as we can, in order to minimize the number of places at which we have to accomplish interim storage. It is simply a logical, better way to do business.

The **Chairman**. As you know, there has been much speculation as to what may occur if any of the three existing sites were to close.

In your view, how would the Department of Energy respond to the closure of one of these sites, and under what authority, if any, would DOE sites receive commercial low-level waste?

Mr. **Vaughan**. Mr. Chairman, the Department of Energy does not have clear authority to accept commercially generated low-level wastes for storage and disposal. The DOE facilities are reserved for the disposal of the Department's own low-level wastes, primarily wastes which are the result of its own atomic energy defense activities.

If we reopened DOE sites to civilians non-Department of Energy wastes, basically what we would be doing would be reinstating an interim Federal solution to the problem of developing new disposal capacity for civilian waste, and I believe we would reduce the incentives for the States to develop their own solutions, as required by the Low-Level Radioactive Waste Policy Act.

For these reasons we do not think that is a prudent course of action. Obviously, if we had a national emergency, we would have to revisit the problem, but we do not think it is a prudent course of action at this time.

The **Chairman**. In addressing a similar issue, on prior occasions, the Department indicated it would first seek permission or approval from State authorities, before receiving waste at a DOE site.

Assuming that a State refused to give permission, does DOE have the ability to override the State's decision?

Mr. **Vaughan**. Mr. Chairman, that is a legal question, which I am not sure I know the answer to, and I would be pleased to answer that one for the record.

The **Chairman**. That will be all right.

[Information follows:]

The Department does not have the authority to accept for disposal commercially generated low-level waste except in very limited circumstances. Thus, we cannot envision DOE's acquiring such waste on a large scale without first obtaining legislative authority (with appropriate funding) for that purpose. If such legislation were adopted, and a State did not want DOE to accept the low-level waste at a DOE site within the State, DOE would have authority to override the State's decision. DOE sites are on Federal land. Under the Supremacy clause of the Constitution, a State cannot adopt rules, absent specific Federal legislation, which regulate the Federal Government's use of Federal land.

The **Chairman**. If DOE was to accept commercial low-level waste, how would the Department's responsibility and authority over that waste be affected, in view of the Nuclear Regulatory Commission's jurisdiction over possession of nuclear materials?

Mr. **Vaughan**. Mr. Chairman, that, indeed, is a knotty question, which would have to be resolved, and for which there is not a ready answer.

As you know, the Department provides its own oversight responsibility for its low-level wastesites, for its own wastes, generated primarily in accordance with our atomic energy defense activities, and we continue to do that oversight under the authority of the

Atomic Energy Act, and do not currently have any licensed NRC sites for that purpose.

The CHAIRMAN. Do you want to answer that for the record?

Mr. VAUGHAN. We will be glad to provide you a more complete answer for the record.

[Information follows:]

If DOE were required to accept commercial low-level waste for disposal at the current sites, there would be serious interference with the effective conduct of the Department's nuclear defense mission. There are also questions of limited disposal capacity, funding authority, and manpower availability. It is highly likely that separate facilities dedicated to the commercial waste would be required. In light of the foregoing, it seems apparent that appropriate legislation, authorizing DOE to accept commercial waste and increasing its budget for that purpose, would be necessary before DOE could legally and practically accept commercial waste on a large scale. Such legislation could state what, if any, role the Nuclear Regulatory Commission (NRC) could play in expanded DOE low-level waste activities. Since NRC does not now license DOE's low-level waste activities, this approach could be continued.

The CHAIRMAN. I have another question you might answer for the record, too, then.

If the day for exclusion of out-of-region waste is extended, as proposed by Congressman Udall, how long of an extension would the Department of Energy favor?

Mr. VAUGHAN. Mr. Chairman, in my statement which we have submitted for Congressman Udall for his hearings, which are running today concurrently with this one, we have not objected to the 1993 date per se, but would simply make the strong proviso that if any extension date is selected, be it 1 year or 7 years, that the Congress continue to incorporate in that consent language or in those amendments some strong forcing functions, be they economic or whatever, that would encourage the completion of necessary compacts in the remaining States and regions as soon as possible.

I believe, as this committee well knows, the technology is available to do that. We are not dealing here today with a technical problem. Adequate technology is available to do it, and so we would urge that it be completed as soon as possible.

The CHAIRMAN. Would an extension help or deter the development of other burial sites?

Mr. VAUGHAN. I think, as a practical matter, Mr. Chairman, an extension would help in the development of other burial sites because, as is covered in my detailed statement which you have received for the record, the status in a number of the States who were on the verge of formulating compacts is such that they could not practically complete the process of screening, selecting and licensing a site prior to the current 1986 deadline.

The CHAIRMAN. Now, I have some other questions you can answer for the record, as I indicated a few moments ago.

[Information follows:]

QUESTIONS FOR JAMES W. VAUGHAN, JR., DEPARTMENT OF ENERGY

Question 1. One of the main components of low-level radioactive waste management is volume reduction. Would you comment on the potential for further volume reduction, considering present knowledge and technology?

Answer. The response was provided in the text of the transcript.

Question 2. There has been much discussion of a proposal that nuclear utilities store their low-level waste for a limited time not to exceed seven years, as part of an overall volume reduction plan. What advantages, disadvantages, or problems do you see in such a proposal?

Answer 2. Many utilities can store their own low-level waste under existing operating licenses for up to 5 years. Some utilities have already planned to store their low-level waste. Others do not have facilities for such storage. If utilities would be required to store their own low-level wastes and perhaps wastes from other generators, there would be questions of cost and payment; facility licensing and the ability of the States and the Nuclear Regulatory Commission to meet the increased operational licensing demand; capability of the utilities to accommodate the volumes and types of wastes that need to be stored; storage container performance capabilities; and other considerations, such as liability issues and the time needed to evaluate and provide for this option.

Question 3. In your testimony, you referred to site selection and development as the next major step. Does the Department have any specific suggestions in this area which may assist in expediting both site selection and licensing?

Answer 3. In order for a State or region to meet its responsibilities to develop a new low-level radioactive waste disposal site and to commence operations, the following series of activities are normally required:

Develop a methodology for host State and site selection;
Implement the methodology and select a site;
Characterize the site for a license application;
License the site for development and operation;
Construct the facility; and
Open the facility to receive waste for disposal.

Although three compact regions and two States have initiated the first step, no State or region has selected a site for a new disposal facility, and only one State has implemented a site selection process that has resulted in a set of optional sites that could be selected. At this time, there are no known technical reasons that prevent a siting methodology from being developed and implemented for each compact region.

Several ways that new disposal site selection and licensing could be expedited are: Congressional consent to proposed regional compacts; Availability of technical advice to support State/regional compact decisionmaking; and Assurance of the public and their representatives that the waste management and disposal technologies selected are safe and effective.

Question 4. As you know, there has been much speculation as to what may occur if any of the three existing sites were to close. In your view, how would the Department of Energy respond to the closure of one of these sites, and under what authority, if any, would DOE sites receive commercial low-level waste?

Answer. If any of the three existing disposal sites were to close, thereby restricting access to waste generators in certain States, the Department, through its Low-Level Radioactive Management Program, would provide technical advice and assistance to help States assure safe management of low-level wastes. With regard to the use of DOE disposal sites, the Department supports the intent of the Low-Level Radioactive Waste Policy Act, in which responsibility for providing for disposal capacity for low-level wastes generated within their borders remains with the States. The Department does not have clear authority, incentive, or funding to accept commercial low-level waste for either storage or disposal. We have supported efforts to develop agreements among the various proposed compacts to assure that regions without existing disposal capacity will have temporary access to other regions, should the Congress ratify the compacts.

Opening DOE sites to non-DOE wastes would provide a Federal solution to the problem of developing new disposal capacity for civilian wastes, and eliminate incentives for States to develop their own solutions. In addition, it would have negative implications for States hosting DOE sites, and further load the already constrained capacity to dispose of current DOE waste.

Question 5. In addressing a similar issue on prior occasions, the Department indicated that it would first seek permission or approval from State authorities, before receiving waste at a DOE site. Assuming that a state refused to give permission, does DOE have the ability to override the State's decision?

Answer. The response to this question appears as an insert.

Question 6. If DOE were to accept commercial low-level waste, how would the Department's responsibility and authority over that waste be affected, in view of the Nuclear Regulatory Commission's jurisdiction over possession of nuclear materials?

Answer. The response to this question appears as an insert.

The CHAIRMAN. We are very pleased to have an able member of this committee here this morning, the assistant majority leader, the distinguished Senator from Wyoming, Mr. Simpson.

Mr. Simpson, do you have any questions?

Senator SIMPSON. Mr. Chairman, let me just say that I hope everyone dealing with the issue will realize that without your insistence and perseverance on this, nothing would have been done, I can promise you that. You brought this to our attention. You were very adamant about the serious need and the serious issue in your own home State. We have held hearings in Washington State and in Wyoming. We now have legislation on the books. You have been extraordinary, and awesome, and tenacious, and consistent when you want to get something done.

I think it is critically important that we get something done because too many States are in a free-ride situation. And unless we get something done, they are going to leave it to somebody else. We do that beautifully with low-level waste. We do that now with high-level waste. Everybody wants to do something about it but nobody wants it. Somewhere alone the line you do it, whether it is putting MX in Wyoming or low-level wastes in other States. Somebody has got to do it unless we just decide to cop out.

So I just want to thank you and tell you how much I appreciate what you have done and how much I enjoy working with you as chairman of the Subcommittee on Nuclear Regulation, and I pledge to you that I will assist in any way possible, continue to assist from that dual vantage point of being a member of your Committee on the Judiciary and a member of the Environment and Public Works.

I have a statement I will enter into the record and request it be done. I just want to thank you. You have been remarkable. It must be very frustrating and I know it is to you.

The CHAIRMAN. Thank you very much, Senator Simpson.

[Statement follows:]

PREPARED STATEMENT OF SENATOR ALAN K. SIMPSON

Mr. Chairman, I should like to commend you for scheduling today's hearing on the low-level radioactive waste compacts. It has now been over four years since the Congress passed the "Low-Level Radioactive Waste Policy Act"—an act that you, Mr. Chairman, were directly involved in drafting and instrumental in securing its passage late in the 96th Congress. That act declares that low-level waste disposal is a responsibility most appropriately carried out by the States. Furthermore, that act establishes a framework for States to work together in this effort, by organizing regional interstate compacts for the purpose of handling low-level waste disposal in an effective, safe, and efficient manner.

Over the past four years, the States have been working diligently to organize the compacts called for under this Act. Many of those States have managed to reach agreement and have, in turn, submitted their compacts to the Congress for the required congressional approval. On February 7, 1985, I reintroduced the Rocky Mountain compact for the purpose of securing the required approval. This compact—which includes the States of Wyoming, Colorado, New Mexico, and Nevada—, together with the Southeast and Northwest compacts are now before this committee for action. I endorse and support your efforts to seek early action on these compacts. It is fundamently unfair to expect those States—including the State of South Carolina—that have carried the burden of providing low-level waste disposal sites for the entire Nation up to now, to continue to do so. Accordingly, I will support you in your efforts to secure early congressional approval of these compacts, so that we may move forward with the framework established in the 1980 Act. I look forward to working with you Mr. Chairman on this effort. Thank you.

Mr. **Vaughan**. Let me say the Department of Energy also appreciates your energies with respect to the matter of getting on with the business of putting low-level waste disposal compacts and sites in place. We are completely in agreement with Senator Simpson's remarks that he just made.

The **Chairman**. The distinguished Senator from Kentucky, Senator McConnell.

Senator **McConnell**. Mr. Chairman, as a new member of this committee, I am essentially here to learn this morning and I have no questions. I too want to comment you for your activity in this most important matter. Thank you.

The **Chairman**. Thank you very much.

I want to express my appreciation to you, Mr. Vaughan, for your testimony. You are now excused.

Mr. **Vaughan**. Thank you, Mr. Chairman.

[Prepared statement follows:]

STATEMENT OF
JAMES W. VAUGHAN, JR.
ACTING ASSISTANT SECRETARY FOR NUCLEAR ENERGY
U.S. DEPARTMENT OF ENERGY
BEFORE THE
SENATE JUDICIARY COMMITTEE

MARCH 8, 1985

Mr. Chairman and Members of the Committee, I am pleased to have the opportunity to present the Department's views on the formation of regional low-level radioactive waste management compacts and to comment on the proposed compacts for the Southeast, Rocky Mountain, and Northwest regions currently before this Committee. This testimony will provide an overview of the current status of regional compacts, based on the interaction and assistance that the Department of Energy's Low-Level Radioactive Waste Management Program has provided to the States to meet their responsibilities under the Low-Level Radioactive Waste Policy Act of 1980. Also, my remarks will present the Department of Energy's views on several issues that could impede further progress in this area.

As you are aware, the final step in the formation of regional compacts is the provision of Congressional consent. It is in this context that I wish to note the amendments to the Low-Level Radioactive Waste Policy Act proposed by Congresman Udall on February 7, 1985. The provisions of Congressman Udall's proposed Amendments Act provide a framework for the development of consistent and comprehensive solutions to the current stalemate that has delayed final consent to the compacts.

STATUS OF COMPACTS

In response to the Low-Level Waste Policy Act of 1980, most States generally have chosen the option of forming regional compacts, resulting in the potential formation of nine separate compacts comprising a total of 40 States and accounting for about 83 percent of the Nation's civilian low-level waste currently shipped to the three operating disposal sites. A map of the Nation, showing the general status of compacts in regard to State membership is attached to this statement.

To date, the following events have occurred:

- States in the Northwest, Southeast, Rocky Mountain, Central, and Midwest regions have negotiated among themselves and constituted compact commissions. These five regional compacts were submitted to the 98th Congress for consent.
- The new Central Midwest compact, comprising Illinois and Kentucky, is being prepared for submission to Congress.
- The future of the Northeast compact is uncertain, due to questions regarding State membership.
- A new Western regional compact has been negotiated between Arizona and California. Arizona has enacted the necessary compact legislation, but California has yet to complete its action.
- Pennsylvania has proposed an Appalachian regional compact for its contiguous States, and consideration by the various State legislatures is expected later this year.

NEW DISPOSAL CAPACITY

Turning now to the development of new disposal capacity, I will provide a summary of progress to date. One of the most important activities in recent months for all regions and several States has been the change in focus from forming compacts to site selection and new facility development.

Appalachian Region

Under the terms of the new Appalachian compact, Pennsylvania has offered to become the host State and has invited contiguous States to join. Regional membership is still in the formative stage, and compact agreement has not yet been approved in the various State legislatures. Screening and selection of the location for a disposal facility have not yet begun.

Central Region

A first-stage site screening study of the Central State region was begun last year and is scheduled for completion in mid-1985. The study uses exclusionary criteria and will show those areas in all five States that should not be considered for low-level waste disposal. No host State has been identified, and the screening process requires a State to volunteer before subsequent action can be taken.

Central Midwest Region

Illinois has been tentatively identified as the host State in the Central Midwest compact. Kentucky has joined by executive approval, and the legislature is expected to ratify the compact in its next regular session.

Midwest Region

The Midwest region has recently begun to develop a regional management plan that will accomplish the prerequisite tasks to select a host State and a site.

Northeast Region

The original initiative of the Coalition of Northeastern Governors is now in question due to fragmentation of the Northeast States into several smaller groups. Only four States have approved the compact; however, two of these may now join the new Appalachian compact region. Many of the major waste-generating States have not yet decided whether to join an existing compact, form a new region, or pursue independent status.

Rocky Mountain Region

The Rocky Mountain Compact was developed with plans to use the existing Beatty, Nevada, facility in the near term. Colorado has volunteered to host the next regional facility and is continuing with its program to identify potential sites and to attempt to find a county within the State that would volunteer to host a low-level radioactive waste disposal site.

Southeast Region

The Southeast compact requires that a new facility be developed prior to December 31, 1992, by which time the Barnwell facility in South Carolina is expected to cease operations. To this end, Virginia has begun a preliminary site screening and a public involvement program. Concurrent with this effort, the region is developing procedures and criteria to be used in siting and developing a new facility.

Northwest Region

The existing Hanford disposal site is expected to be used as the disposal facility for the Northwest regional compact. The compact has been introduced in both Houses of Congress for consent. Washington State is in the process of preparing a facility use plan for the Hanford site.

Western Region

California, in planning to establish a Western compact with Arizona, has embarked on an "applicant designee" process that will result in a proposal for facility development from a contractor designee. California has offered to be the host State.

Activities of Other States

Texas, the only State pursuing go-it-alone status, has chosen to develop a new disposal facility by creating a State Low-Level Radioactive Waste Disposal Authority. Site selection was scheduled for early 1985, but the State has deferred actual site selection and acquisition until further studies can be conducted. In South Dakota, an area near Edgemont is currently under investigation by industry as a possible disposal site; however, the State has not yet determined whether it will pursue compact affiliation or allow facility development of the site.

INTERREGIONAL AGREEMENTS

Progress over the past 4 years, while slow, has resulted in the States and regions reaching the threshold for establishment of a nationwide low-level waste management and disposal system. Because no new facility will likely be developed before January 1, 1986, the issue of post-1985 access to existing disposal sites is perhaps the most significant factor delaying the implementation of the compacts now before the Congress. Discussions over the past year among the representatives of States, regions, Congressional Committees, and others have greatly increased the possibility that this issue will be resolved during this Congressional session. The Department is encouraged to note that the States are now considering a post-1985 access approach based on limited access until 1993 at the three currently operating facilities. In this regard, the consent language and amendment to the Low-Level Radioactive Waste Policy Act of 1980 proposed by Congressman Udall would impose specific limitations on the amount of waste that would be received at each currently operating disposal site. He has also recommended a format for interregional agreements that should help achieve resolution of the post-1985 site access issue until new disposal capacity can be developed. Also, as we have recommended in a recent report responding to questions from Congressman Udall,[1] the Department believes that a region or State working on development of a new facility should have a schedule that would identify target dates for completion of critical development activities, such as selection of a host State, selection of facility location, and submittal of a facility license application.

Congressional consent to compacts and resolution of the post-1985 site access issue will allow States and regions to focus on the next major step in getting new disposal capacity, namely, disposal site selection and development. This will not be an easy task to complete. It will require a balanced approach addressing social, economic, political, and technical concerns. The Department of Energy intends, within the limits of its authority, to provide technical support for these efforts.

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[1] Considerations for Evaluating Proposed Low-Level Radioactive Waste Compacts, DOE/NE-0058 (February 1985).

COMMENTS ON PROPOSED COMPACTS

I would like to make several general comments before turning to the compacts before you today.

(1) It is our understanding that, except for establishing State responsibility and endorsing a regional approach to low-level waste management and disposal, it was the intent of Congress not to change the general approach to low-level radioactive waste management that has operated successfully for the past 20 years. Changes in the current system should be minimized.

(2) Where changes to the present system are necessary, they should be consistent with the intent of the Act; namely, that all the States should share responsibility for the disposal of low-level waste, rather than relying solely on the existing facilities in the States of South Carolina, Washington, and Nevada. Consideration must be given to the diverse concerns of Federal, regional, State, local, and private interests. States should complete negotiations to accommodate these concerns as soon as possible, if they are to meet their responsibilities under the Act.

(3) If Congress grants consent to any regional compact to exclude out-of-region waste before all regions or States have disposal facilities available, it is essential that provisions be made for those States without available disposal sites to manage their wastes adequately on an interim basis.

(4) I would note that there is one other aspect of this matter which warrants attention. As you are aware, there is a wide spectrum of facilities located throughout the country

which perform work in support of the national defense and public health, and which generate low-level radioactive waste in the process. These facilities, which include both commercial and Federal activities, have historically used commercial disposal sites for their low-level waste. As the waste compact process evolves, it is important to understand that decisions which restrict the ability of those facilities to dispose of low-level waste may adversely affect their operation. The consequences of such decisions must be recognized. The Department of Defense (DOD) testified before the Senate Judiciary Committee in January 1984, expressing their concerns relative to DOD facilities.

(5) We believe that the 1986 date for excluding wastes from nonmember States should not be extended without establishing measures that would strongly encourage continued progress toward the development of new facilities in regions and State without ready access to disposal sites. It would be a particularly unfortunate development if States that were unwilling to pursue compact formation or development of their own disposal facilities instead required wastes to be stored on a prolonged interim basis. This would be inadvisable from technical, financial, environmental, and policy standpoints.

I would like now to summarize the Department's views on the proposed Southeast, Rocky Mountain, and Northwest compacts currently before your Committee for consent. We have provided specific comments for each of these proposed compacts in our testimony at hearings in 1982 and 1983, and I will provide an updated detailed set of our comments to the Committee. The essence of our concerns regarding these compacts is as follows:

(1) All compacts should be consistent in the definition of low-level waste, in order to assure a system of low-level waste disposal that will accommodate all such waste, including Federal agency waste currently being disposed of in civilian sites. Currently, the definition of

low-level waste varies among the compacts. To assure a workable nationwide system, Congress should adopt the definition of low-level waste used in the Nuclear Waste Policy Act of 1982 in the Congressional consent language for each compact.

(2) The term "Federal research and development activities," as it appears in the Low-Level Radioactive Waste Policy Act of 1980, needs to be defined. In compact consent language, the term "Federal research and development activities" should be defined to include all activities of the Secretary of Energy, other than the Secretary's atomic energy defense activities, as already defined in the Low-Level Radioactive Waste Policy Act of 1980. Such a definition would ensure that Federal agencies currently disposing of their low-level wastes in commercially operated facilities would be able to continue using such facilities.

(3) Requirements for inspection at DOE facilities where classified work is performed must take into consideration the agency's statutory obligation to carefully control access to sensitive military technology. In general, we believe that on-site inspection at any DOE installation should be made on the basis of prior consent, and that access to security areas or classified operations of a Federal installation or commercial facility performing work under Federal contract or subcontract should not be authorized. For such facilities, any necessary inspections could take place at some intermediate location between the generation site and the disposal facility. Furthermore, access to any classified information pertaining to the work at such facilities is unnecessary and should be prohibited.

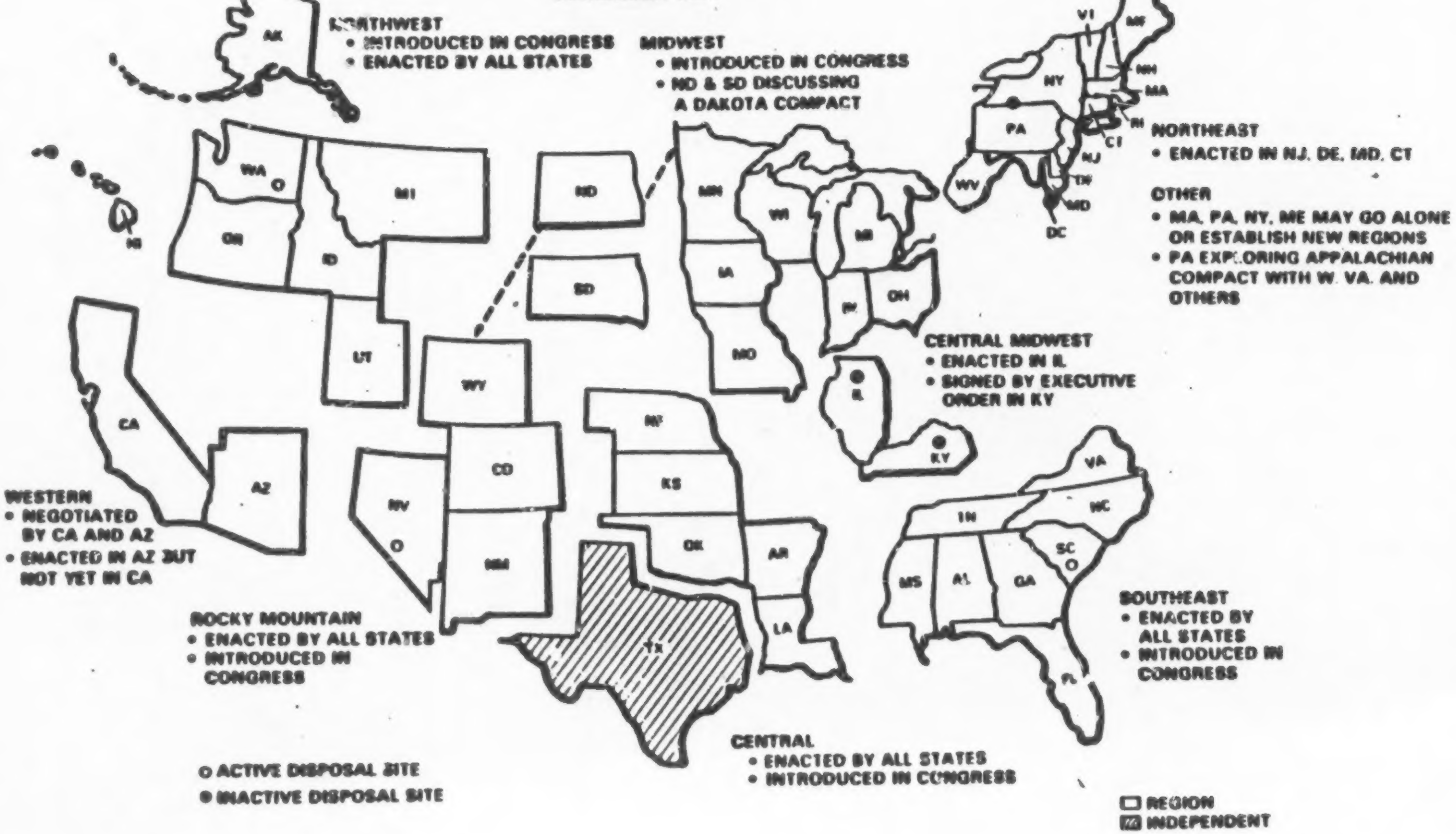
(4) We support provisions that would permit a regional compact commission to restrict the export of low-level radioactive waste generated within that region. Our support is based on economic considerations. The authority of regional compact commissions to govern the transfer of waste among regions can help to stabilize the management of low-level

radioactive waste within each region. Such measures could also add predictability to economic projections for regional disposal site development and operations, interim waste storage requirements, and waste treatment operations. However, the Department and the Nuclear Regulatory Commission feel that export may be necessary in some situations for technical reasons, or to protect the public health and safety.

In conclusion, the Department supports early Congressional consent to regional compacts for management and disposal of low-level radioactive waste. The Department's comments are intended to suggest refinements that could ensure the workability and longevity of the final program forged by the States and the Congress. We would be pleased to work with the Committee to resolve the concerns that have been noted in our testimony.

The Department of Energy will continue to assist in and facilitate the emplacement of a comprehensive Nationwide system that is sensitive to State, regional and Federal needs and assures safe and effective management and disposal of the Nation's low-level radioactive waste. We believe that once regional compacts consented to by the Congress begin to operate and new disposal facilities are sited, many of the problems now delaying progress in this area can be rapidly resolved.

LOW LEVEL RADIOACTIVE WASTE
COMPACT STATUS
DECEMBER 1984



NORTHWEST
- INTRODUCED IN CONGRESS
- ENACTED BY ALL STATES

MIDWEST
- INTRODUCED IN CONGRESS
- ND & SD DISCUSSING A DAKOTA COMPACT

NORTHEAST
- ENACTED IN NJ, DE, MD, CT

OTHER
- MA, PA, NY, ME MAY GO ALONE OR ESTABLISH NEW REGIONS
- PA EXPLORING APPALACHIAN COMPACT WITH W. VA. AND OTHERS

CENTRAL MIDWEST
- ENACTED IN IL
- SIGNED BY EXECUTIVE ORDER IN KY

WESTERN
- NEGOTIATED BY CA AND AZ
- ENACTED IN AZ BUT NOT YET IN CA

ROCKY MOUNTAIN
- ENACTED BY ALL STATES
- INTRODUCED IN CONGRESS

SOUTHEAST
- ENACTED BY ALL STATES
- INTRODUCED IN CONGRESS

CENTRAL
- ENACTED BY ALL STATES
- INTRODUCED IN CONGRESS

○ ACTIVE DISPOSAL SITE
● INACTIVE DISPOSAL SITE

☐ REGION
▨ INDEPENDENT

The **Chairman**. Our next witness is Hon. G. Wayne Kerr, Director of Office of State Programs, Nuclear Regulatory Commission.

Mr. Kerr, come around.

Mr. Kerr, you have a written statement, I believe.

Mr. **Kerr**. Yes, sir, I do, Mr. Chairman.

The **Chairman**. Now, would it suit you just to put your entire statement into the record and then give us the thrust of it in a few words?

Mr. **Kerr**. Yes, sir, Mr. Chairman. I would like my full statement submitted for the record because there are a number of attachments of significance to it. But there are a number of points that I would like to make if you would bear with me.

The **Chairman**. Without objection, the entire statement will go in the record, and you may proceed and make it as brief as you can to bring out the main points.

STATEMENT OF HON. G. WAYNE KERR, DIRECTOR OF OFFICE OF STATE PROGRAMS, NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC

Mr. **Kerr**. I am pleased to be here today to testify on the Northwest, Southeast, and Rocky Mountain low-level radioactive waste management compacts under consideration.

The NRC previously testified before this committee in the 98th Congress on these three compacts as well as on the central interstate compact.

With your permission, my comments or our comments from the previous testimony that has been submitted to the committee are attached to my statement in full and I would like to have those incorporated also.

My testimony will summarize those comments briefly with respect to the three compacts under consideration in the 99th Congress.

First, the Commission believes that all compacts should be consistent with the existing scheme for Federal regulation of low-level radioactive waste. In this regard, it is particularly important to preserve existing NRC, Department of Transportation, and agreements with State health, safety, and environmental regulatory authority in the areas of packaging, transportation, and waste disposal.

A number of State officials have testified that it is not their intention to duplicate, change, or interfere with current Federal regulations. However, the compacts themselves are unclear in this regard. We raised this issue because of the interlocking definitions in the compacts and functions assigned to compact commissions which appear to give them aspects of regional health and safety regulatory authority, with possible preemption of existing Federal regulatory authority. Clarifying statutory language is desirable on this point.

Identical congressional statutory language would serve to emphasize the intent of Congress to preserve Federal authority and would help ensure uniform treatment by the courts. Although the southeast compact adequately addresses these concerns, Congress may wish to impose the same general conditions on it as on the others in the interest of uniformity.

The Commission also believes there should be a nationally accepted definition of low-level radioactive waste that is essentially identical for all compacts. Since the compacts contain varying definitions of low-level waste, the Commission is recommending language to conform them reasonably close to the definition in the Low-Level Radioactive Waste Policy Act.

The Commission is also concerned with a provision in the Rocky Mountain and southeast compacts which prohibit the export of low-level radioactive waste for management outside the region without authorization by the Rocky Mountain Board or Southeast Commission respectively. These provisions do not conform to Public Law 96-573, which does not authorize restrictions on exports and place an undue burden on interstate commerce.

The Commission has also previously expressed concern about language in the Rocky Mountain compact which could be interpreted as restricting the importation of out-of-region waste for activities other than disposal, again exceeding the authority conferred by Public Law 96-573.

We are providing for the record a more detailed explanation of export and import low-level radioactive waste company restrictions.

Finally, the northwest compact bill contains congressional consent language whereby NRC is "authorized and directed to require" NRC licensees to comply with the privisions of the compact. To the extent that some of the compact provisions would alter the existing Federal regulatory scheme, we believe that NRC licensees should not be required to comply with them. We therefore recommend that this provision be deleted.

In order to respond to your questions concerning low-level waste storage capacity at nuclear powerplant sites, the staff conducted a brief telephone survey of licensees and applicants for operating licenses. The questionnaire and a summary table are enclosed. The information was acquired informally and not as a result of any formal reporting requirement of licensees and, as such, is subject to some uncertainty and change.

In brief, of those surveyed to date, 35 sites have storage capacity of less than 6 months. Of 35 sites which have greater capacity, 6 have less than 1 year, 7 have 1 year, 12 have 2 years, and 10 have 4 to 5 years; 12 licensees/applicants plan to either increase or build new storage facilities for 2 years of storage capacity, and 18 for 5-year capacity.

According to licensees, if the need for 7-year storage capacity arose, impacts would include license amendments, new licenses, expansion of facilities already built, increased financial burdens, increased potential for personnel radiation exposure, and space limitations.

Your staff also asked that my testimony comment on legislation recently introduced by Congressman Morris Udall in the House, H.R. 1083, and on proposals currently being developed by the several States and regional compact representatives brought together by the National Governors' Association, whose initial efforts are partially reflected in H.R. 1083.

The Commission is currently conducting an analysis of H.R. 1083, the Low-Level Radioactive Waste Policy Amendments Act of 1985. The NRC will provide the committee with more detailed written comments for the record in the near future.

With respect to the overlapping jurisdictions of NRC and EPA for low-level wastes in which radioactive and nonradioactive hazards are commingled. The Commission is currently conducting a study of the nonradioactive aspects of such wastes in order to evaluate the extent to which they contribute to the overall hazards of disposal. The Commission intends to use the results of this study in discussing with EPA the need for hazardous waste regulatory action beyond that currently provided for by NRC in 10 CFR Part 61. If these discussions are not productive, legislative resolution of each agency's jurisdiction may be required.

That concludes my prepared remarks, Mr. Chairman. I will be happy to answer any questions.

The CHAIRMAN. Thank you, Mr. Kerr.

Mr. Kerr, there has been substantial discussion of interregional transportation of low-level waste. This issue arises in several contexts, including the economics of operating a regional facility.

Does the NRC have any position with regard to the question of the export-import issue?

Mr. KERR. We covered the export-import issue in my testimony, Mr. Chairman, in light of a technical consideration and not the economic consideration. We do not make any particular judgments on the economics of the movement of waste from one compact to another, but there is a fairly elaborate discussion of why some exports, occasional, not very large in volume to my understanding, might be necessary to go from one region to another, and there is a discussion of that attached to my testimony.

The CHAIRMAN. Now, answer this for the record if you want to, if you would identify the problems you see with requiring onsite storage for 5 or 10 years.

Mr. KERR. Yes; we will be happy to furnish that for the record.

The CHAIRMAN. If there are no other questions, then we will excuse you at this time and thank you for your appearance.

Mr. KERR. Thank you, sir.

[Prepared statement and response to written questions follow:]

TESTIMONY BEFORE THE
SENATE COMMITTEE ON THE JUDICIARY

BY

G. WAYNE KERR
DIRECTOR, OFFICE OF STATE PROGRAMS

ON BEHALF OF THE

U.S. NUCLEAR REGULATORY COMMISSION

MR. CHAIRMAN AND MEMBERS OF THE SUBCOMMITTEE. I AM G. WAYNE KERR, DIRECTOR OFFICE OF STATE PROGRAMS . I AM PLEASED TO BE HERE TODAY TO TESTIFY ON THE NORTHWEST, SOUTHEAST AND ROCKY MOUNTAIN LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT COMPACTS UNDER CONSIDERATION BY THE COMMITTEE.

THE NRC PREVIOUSLY TESTIFIED BEFORE THE COMMITTEE ON THE JUDICIARY IN THE 98TH CONGRESS ON THESE THREE COMPACTS AS WELL AS ON THE CENTRAL INTERSTATE COMPACT. WITH YOUR PERMISSION, AND ON BEHALF OF THE COMMISSION, I WOULD LIKE TO SUBMIT FOR THE RECORD THE COMMISSION'S STATEMENT PROVIDING SPECIFIC SUGGESTIONS ON THE PROPOSED CONGRESSIONAL CONSENT LANGUAGE FOR EACH OF THESE COMPACTS.

MY TESTIMONY TODAY WILL SUMMARIZE THOSE COMMENTS BRIEFLY WITH RESPECT TO THE THREE COMPACTS UNDER CONSIDERATION IN THE 99TH CONGRESS.

FIRST, THE COMMISSION BELIEVES THAT ALL COMPACTS SHOULD BE CONSISTENT WITH THE EXISTING SCHEME FOR FEDERAL REGULATION OF LOW-LEVEL RADIOACTIVE WASTE. IN THIS REGARD, IT IS PARTICULARLY IMPORTANT TO PRESERVE EXISTING NRC, DEPARTMENT OF TRANSPORTATION AND AGREEMENT STATE HEALTH, SAFETY AND ENVIRONMENTAL REGULATORY AUTHORITY IN THE AREAS OF PACKAGING, TRANSPORTATION, AND WASTE DISPOSAL.

A NUMBER OF STATE OFFICIALS HAVE TESTIFIED THAT IT IS NOT THEIR INTENTION TO DUPLICATE, CHANGE OR INTERFERE WITH CURRENT FEDERAL REGULATION. HOWEVER, THE COMPACTS THEMSELVES ARE UNCLEAR IN THIS REGARD. WE RAISE THIS ISSUE BECAUSE OF THE INTERLOCKING DEFINITIONS IN THE COMPACTS AND FUNCTIONS ASSIGNED TO COMPACT COMMISSIONS WHICH APPEAR TO GIVE THEM ASPECTS OF REGIONAL HEALTH AND SAFETY REGULATORY AUTHORITY, WITH POSSIBLE PREEMPTION OF EXISTING FEDERAL REGULATORY AUTHORITY. CLARIFYING STATUTORY LANGUAGE IS DESIRABLE ON THIS POINT.

IDENTICAL CONGRESSIONAL STATUTORY LANGUAGE WOULD SERVE TO EMPHASIZE THE INTENT OF CONGRESS TO PRESERVE FEDERAL AUTHORITY AND WOULD HELP ENSURE UNIFORM TREATMENT BY THE COURTS. ALTHOUGH THE SOUTHEAST COMPACT ADEQUATELY ADDRESSES THESE CONCERNS, CONGRESS MAY WISH TO IMPOSE THE SAME GENERAL CONDITIONS ON IT AS ON THE OTHERS IN THE INTEREST OF UNIFORMITY.

THE COMMISSION ALSO BELIEVES THAT THERE SHOULD BE A NATIONALLY ACCEPTED DEFINITION OF LOW-LEVEL RADIOACTIVE WASTE THAT IS ESSENTIALLY IDENTICAL FOR ALL COMPACTS. SINCE THE COMPACTS CONTAIN VARYING DEFINITIONS OF LOW-LEVEL WASTE, THE COMMISSION IS RECOMMENDING LANGUAGE TO CONFORM THEM REASONABLY CLOSE TO THE DEFINITION IN THE LOW-LEVEL RADIOACTIVE WASTE POLICY ACT.

THE COMMISSION IS ALSO CONCERNED WITH A PROVISION IN THE ROCKY MOUNTAIN AND SOUTHEAST COMPACTS WHICH PROHIBIT THE EXPORT OF LOW-LEVEL RADIOACTIVE WASTE FOR MANAGEMENT OUTSIDE THE REGION WITHOUT AUTHORIZATION BY THE ROCKY MOUNTAIN BOARD OR SOUTHEAST COMMISSION RESPECTIVELY. THESE PROVISIONS DO NOT CONFORM TO PUBLIC LAW 96-573, WHICH DOES NOT AUTHORIZE RESTRICTIONS ON EXPORTS, AND COULD PLACE AN UNDUE BURDEN ON INTERSTATE COMMERCE.

THE COMMISSION HAS ALSO PREVIOUSLY EXPRESSED CONCERN ABOUT LANGUAGE IN THE ROCKY MOUNTAIN COMPACT WHICH COULD BE INTERPRETED AS RESTRICTING THE IMPORTATION OF OUT-OF-REGION

WASTE FOR ACTIVITIES OTHER THAN DISPOSAL, AGAIN EXCEEDING THE AUTHORITY CONFERRED BY P.L. 96-573.

WE ARE PROVIDING FOR THE RECORD A MORE DETAILED EXPLANATION OF EXPORT AND IMPORT LOW-LEVEL RADIOACTIVE WASTE COMPACT RESTRICTIONS.

FINALLY, THE NORTHWEST COMPACT BILL CONTAINS CONGRESSIONAL CONSENT LANGUAGE WHEREBY NRC IS "AUTHORIZED AND DIRECTED TO REQUIRE" NRC LICENSEES TO COMPLY WITH THE PROVISIONS OF THE COMPACT. TO THE EXTENT THAT SOME OF THE COMPACT PROVISIONS WOULD ALTER THE EXISTING FEDERAL REGULATORY SCHEME, WE BELIEVE THAT NRC LICENSEES SHOULD NOT BE REQUIRED TO COMPLY WITH THEM. WE THEREFORE RECOMMEND THAT THIS PROVISION BE DELETED.

IN ORDER TO RESPOND TO YOUR QUESTIONS CONCERNING LOW-LEVEL WASTE STORAGE CAPACITY AT NUCLEAR POWER PLANT SITES, THE STAFF CONDUCTED A BRIEF TELEPHONE SURVEY OF LICENSEES AND APPLICANTS FOR OPERATING LICENSES. THE QUESTIONNAIRE AND A SUMMARY TABLE ARE ENCLOSED. THE INFORMATION WAS ACQUIRED INFORMALLY AND NOT AS A RESULT OF ANY FORMAL REPORTING REQUIREMENT OF LICENSEES, AND AS SUCH IS SUBJECT TO SOME UNCERTAINTY AND CHANGE.

IN BRIEF, OF THOSE SURVEYED TO DATE, 35 SITES HAVE STORAGE CAPACITY OF LESS THAN SIX MONTHS. OF 35 SITES WHICH HAVE GREATER CAPACITY, 6 HAVE LESS THAN 1 YEAR, 7 HAVE 1 YEAR, 12 HAVE 2 YEARS, AND 10 HAVE 4 TO 5 YEARS.

TWELVE LICENSEES/APPLICANTS PLAN TO EITHER INCREASE OR BUILD NEW STORAGE FACILITIES FOR TWO YEARS OF STORAGE CAPACITY. AND 18 FOR 5 YEAR CAPACITY.

ACCORDING TO LICENSEES, IF THE NEED FOR SEVEN YEAR STORAGE CAPACITY AROSE, IMPACTS WOULD INCLUDE LICENSE AMENDMENTS, NEW LICENSES, EXPANSION OF FACILITIES ALREADY BUILT, INCREASED FINANCIAL BURDENS, INCREASED POTENTIAL FOR PERSONNEL RADIATION EXPOSURE, AND SPACE LIMITATIONS.

YOUR STAFF ALSO ASKED THAT MY TESTIMONY COMMENT ON LEGISLATION RECENTLY INTRODUCED BY CONGRESSMAN MORRIS UDALL IN THE HOUSE, H.R. 1083, AND ON PROPOSALS CURRENTLY BEING DEVELOPED BY THE SEVERAL STATES AND REGIONAL COMPACT REPRESENTATIVES BROUGHT TOGETHER BY THE NATIONAL GOVERNORS' ASSOCIATION, WHOSE INITIAL EFFORTS ARE PARTIALLY REFLECTED IN H.R. 1083.

THE COMMISSION IS CURRENTLY CONDUCTING AN ANALYSIS OF H.R. 1083, THE LOW-LEVEL RADIOACTIVE WASTE POLICY AMENDMENTS ACT OF 1985. THE NRC WILL PROVIDE THE COMMITTEE WITH MORE DETAILED WRITTEN COMMENTS FOR THE RECORD IN THE NEAR FUTURE.

WITH RESPECT TO THE OVERLAPPING JURISDICTIONS OF NRC AND EPA FOR LOW-LEVEL WASTES IN WHICH RADIOACTIVE AND NON-RADIOACTIVE HAZARDS ARE COMINGLED. THE COMMISSION IS CURRENTLY CONDUCTING A STUDY OF THE NON-RADIOACTIVE ASPECTS OF SUCH WASTES IN ORDER TO EVALUATE THE EXTENT TO WHICH THEY CONTRIBUTE TO THE OVERALL HAZARDS OF DISPOSAL. THE COMMISSION INTENDS TO USE THE RESULTS OF THIS STUDY IN DISCUSSING WITH EPA THE NEED FOR HAZARDOUS WASTE REGULATORY ACTION BEYOND THAT CURRENTLY PROVIDED FOR BY NRC IN 10 CFR PART 61. IF THESE DISCUSSIONS ARE NOT PRODUCTIVE, LEGISLATIVE RESOLUTION OF EACH AGENCY'S JURISDICTION MAY BE REQUIRED.

THIS CONCLUDES MY PREPARED REMARKS.

I WOULD BE PLEASED TO ANSWER ANY QUESTIONS THE COMMITTEE MAY HAVE.

CHAIRMAN

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

February 8, 1984

The Honorable Strom Thurmond
Chairman, Committee on the Judiciary
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

During the hearing on the Southeast Interstate Low-Level Radioactive Waste Management Compact in Columbia, South Carolina on September 6, 1983, and in your letter dated November 8, 1983, addressed to G. Wayne Kerr, Director, Office of State Programs, you requested the U.S. Nuclear Regulatory Commission to provide specific suggestions for appropriate consent language for each of the four consent bills now pending in the Congress (S. 247; S.1581; S.1749; S.1991). Pursuant to the specific request of your staff, we are providing herewith the Commission's proposed Congressional consent language with an explanatory introduction in answer to your letter and hearing request.

Sincerely,

Nunzio J Palladino

Nunzio J. Palladino

Enclosure:
Proposed Consent Language

ENCLOSURE 1

DISCUSSION OF PROPOSED CONGRESSIONAL CONSENT LANGUAGE AND LEGISLATIVE HISTORY FOR THE PENDING LOW-LEVEL RADIOACTIVE WASTE INTERSTATE COMPACTS

The Nuclear Regulatory Commission wishes to make several specific suggestions for Congressional consent language for each of the four pending bills to approve regional interstate compacts on low-level radioactive waste. We also mention several points which we think can better be made in committee reports than in the legislation itself. The consent language is set forth for each compact in the Attachment to this Enclosure. In drafting the proposed consent language, we have attempted to "construe" rather than to amend the compacts to avoid the impression that they have been significantly altered and that reratification may be necessary.

For all compacts except the Southeast, we propose a general section which assures that the existing scheme for Federal regulation of low-level waste remains intact.* Subsection (a) of this section preserves existing NRC and Agreement State authority, jurisdiction, and discretion. Subsection (b) states the converse, that the States and compact commissions are not authorized by the compacts to regulate in specified areas where the compacts have the greatest potential for conflict with NRC and Department of Transportation regulatory schemes. See Attachment, Rocky Mountain compact § 5, Northwest compact § 4, Central compact § 4.

We believe these sections are in accord with Congressional intentions. A number of State officials have also testified that it was not their intention to duplicate, change, or interfere with current Federal regulation. However, the compacts are themselves unclear in this regard and suggestions of increased state authority are sufficiently strong that clarifying consent language is desirable. Identical Congressional consent language addressing this problem for all the compacts would emphasize Congress's intention to preserve Federal authority and would help ensure that different compacts are treated similarly in this regard by the courts.

The Southeast compact adequately addresses these concerns. Articles 6(A)(1) and (2) accomplish the same purpose as our proposed subsection (a), and nothing in the compact appears to require our proposed subsection (b). Nevertheless, Congress may wish to impose the same general conditions on the Southeast compact as on the others in the interest of uniformity.

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*The proposed language for the Northwest compact also includes a proposed revision to existing consent language, which appears first.

The next section of the proposed language addresses, first, the definition of low-level radioactive waste. The basic subject matter of the compacts should be essentially identical if a national system is to emerge. Since the compacts contain varying definitions of low-level waste, we have proposed language to conform each reasonably closely to the definition in the Low-Level Radioactive Waste Policy Act, sections 2(2) and (4) (42 U.S.C. 2021b(2), (4)). See Attachment, Rocky Mountain compact §§ 6(a), (b); Northwest compact § 6; Central compact § 5(a).

The second section also addresses the export of waste from a region. The Central and Rocky Mountain compacts provide that waste may not be exported from the compact region without the permission of the compact commission and the Southeast compact permits the compact Commission to prohibit export. As Mr. Kerr has testified, the Commission is concerned that export be allowed when health and safety reasons require it. Our language would require that compact commissions promptly permit the export of waste if the NRC or an Agreement State finds that export of such waste is required to protect the public health and safety. See Attachment, Southeast compact § 4; Rocky Mountain compact § 6(c); Central compact § 5(b).

Finally, section 2(a) of the Northwest compact bill contains Congressional consent language whereby NRC is "authorized and directed to require" its licensees to comply with the provisions of the compact. To the extent that some of the compact provisions in Articles III and IV(3) would alter the existing Federal regulatory scheme, we think that licensees should not be required to comply with them. We therefore believe that this provision should be deleted. The Northwest compact bill also declares that the compact is "in furtherance . . . of the intent of Section 274(b) of the Atomic Energy Act of 1954." Although the practical implications of this provision are unclear, it seems to be intended to provide Congressional ratification of the potential expansion of Agreement State powers which are suggested by Articles III and IV. We therefore believe that this provision should also be deleted. Revised language for section 2(a) is shown in the Attachment.

There are also several points which we think should be made in the committee reports or elsewhere in the legislative history, but which do not fit conveniently into the legislation itself. The Central compact, in Article V(e)(2), states that the compact Commission shall --

> 2. require the appropriate state or states or the U.S. Nuclear Regulatory Commission to process all applications for permits and licenses . . . within a reasonable

> period from the time that a completed application is submitted.

While we agree that licensing reviews should be completed within a reasonable time, we think the legislative history should make clear that this provision is exhortatory, not mandatory. The NRC or Agreement State, as the reviewer of the license or permit application, must have the discretion to consider the relevant health, safety, and environmental issues as it finds necessary. If it were required to comply with a schedule laid down by the compact commission, its independent authority to pass on these matters would be compromised.

Section 3(a) of the Northwest compact bill makes the effective date for exclusion of out-of-region waste under Article IV(2) of the Northwest compact January 1, 1986. However, Article IV(3) contains alternate provisions under which the Northwest compact will accept waste from States outside the compact before Article IV(2) takes effect. These provisions include requirements for 100% inspection of all shipments and for a binding liability agreement from each State outside the region covering accidental releases during shipment or at the regional facility. These provisions discriminate against States outside the compact region before January 1, 1986 and also require a rate of inspection in excess of that considered necessary by NRC.

On the other hand, the Northwest compact may not implement these provisions. Governor Spellman of Washington told this Committee on November 9, 1982 that the development of regulations to implement Article IV(3) will not be put in final form until Congress has acted and the region knows that the parameters within which it is working are consistent with Congressional intent. Subsequently, the Northwest compact representative informed this Committee on March 2, 1983 that assurances from other States of adequate ongoing inspections, indemnification, and other evidence of dealing with the needs of the host State, by substantially complying with the intent of these provisions, would tend to minimize any need for rapid implementation of them. Nonetheless, the provisions of Article IV(3) could be put into effect any time after the compact is approved until Article IV(2) takes effect. The NRC therefore believes that the legislative record should state that Article IV(3) should not be construed to require a rate or frequency of inspections beyond that required by the NRC or an Agreement State where the shipment originates.

Some compact negotiators are concerned about the language of the exclusion, under the Low-Level Radioactive Waste Policy Act, of waste from the "atomic energy defense activities of the Secretary" of Energy. Their concern is that if they follow the legislative language and exclude atomic energy defense waste only from DOE, and then through reorganization or other means such wastes become the responsibility of other agencies such as the Departments of Defense or Commerce, their exclusion would no longer hold. We think that the compacts would not be so narrowly interpreted. However, these apprehensions, and the perceived necessity to broaden the language in the compacts to address all eventualities with respect to the agency generating such atomic energy defense wastes, might be alleviated if Congress were to make it clear that the exclusion applies to the atomic energy defense wastes of the Department of Energy or any successor thereto.

Finally, Article 3(C) of the Southeast compact in effect requires party states to become Agreement States under Section 274b. of the Atomic Energy Act. It is important that the compact be construed to preserve NRC's authority to reject, modify, or accept a proposed agreement or to resume regulatory authority if a state relinquishes its agreement. While Articles 6(A)(1) and (2) of the compact probably accomplish this result, language in the legislative history to this effect would be helpful.

SOUTHEAST COMPACT

S. 1749 and H.R. 3777

Sec. 4. In exercising its authority under Article 4(L) of this compact, the Compact Commission shall promptly permit the export of any waste from the region upon a finding by the Nuclear Regulatory Commission or an Agreement State that the export of such waste is required to protect the public health and safety.

ROCKY MOUNTAIN COMPACT

S. 1991 and H.R. 4388

Sec. 5. (a) Nothing in this compact shall be construed to diminish or otherwise impair the jurisdiction, authority, or discretion of the U.S. Nuclear Regulatory Commission under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.), or any Agreement State under section 274 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2021).

(b) Nothing in this compact, and particularly in Articles III(d) and (f), shall be construed to confer any new authority on the States or the compact Board to --

(i) regulate the packaging or transportation of radioactive wastes in a manner inconsistent with the regulations of the Nuclear Regulatory Commission or the U.S. Department of Transportation,

(ii) regulate health, safety, or environmental hazards from source, byproduct, or special nuclear material, or

(iii) inspect the activities of licensees of the Nuclear Regulatory Commission.

Sec. 6. (a) Article II(g)(i) of this compact shall be construed to exclude from the definition of "low-level waste" or "waste" only waste generated as a result of atomic energy defense activities of the Secretary of Energy, as defined in section 2(4) of the Low-Level Radioactive Waste Policy Act (42 U.S.C. 2021b(4)), and Federal research and development activities.

(b) Article II(g)(iii) of this compact shall be construed to exclude from the definition of "low-level waste" or "waste" only waste materials containing transuranic elements with contamination levels greater than the levels permitted in low-level waste by applicable regulations of the Nuclear Regulatory Commission [as of December 27, 1982].

(c) In exercising its authority under Article VII(b) of the compact, the compact Board shall promptly permit the export of any waste from the region upon a finding by the Nuclear Regulatory Commission or an Agreement State that the export of such waste is required to protect the public health and safety.

NORTHWEST COMPACT

S. 247 and H.R. 1012

Sec. 2. (a) Congress finds that the compact consented to herein is in furtherance of the policy contained in section 4(a)(1) of the Low-Level Radioactive Waste Policy Act of 1980 (42 U.S.C. 2021d(a)(1)). ~~and of the intent of Section 274(b) of the Atomic Energy Act of 1954,~~ In order that this compact may be given full effect, the Nuclear Regulatory Commission ~~is authorized and directed to require licensees subject to its jurisdiction under the Atomic Energy Act of 1954 to comply with the provisions of this compact. The Commission~~ shall consult and cooperate with the states which are parties to this compact in carrying out this section.

* * *

Sec. 4. (a) Nothing in this compact shall be construed to diminish or otherwise impair the jurisdiction, authority, or discretion of the U.S. Nuclear Regulatory Commission under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 *et seq.*), or any Agreement State under section 274 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2021).

(b) Nothing in this compact, and particularly in Articles III and IV, shall be construed to confer any new authority on the States or the Compact Committee to --

(i) regulate the packaging or transportation of radioactive wastes in a manner inconsistent with the regulations of the Nuclear Regulatory Commission or the U.S. Department of Transportation,

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*Our amendments to section 2 refer to the language of H.R. 1012. We understand that the Committee expects to amend section 2 of S.247 to conform to the language of H.R. 1012.

(ii) regulate health, safety, or environmental hazards from source, byproduct, or special nuclear material, or

(iii) inspect the activities of licensees of the Nuclear Regulatory Commission.

Sec. 5. Notwithstanding Article II(2), the term "low-level waste" means radioactive waste that --

(i) is not high-level radioactive waste, spent nuclear fuel, transuranic waste, or byproduct material as defined in section 11 e(2) of the Atomic Energy Act of 1954 (42 U.S.C. 2014(e)(2)),

(ii) is not low-level radioactive waste from atomic energy defense activities of the Secretary of Energy, as defined in section 2(4) of the Low-Level Radioactive Waste Policy Act (42 U.S.C. 2021b(4)), or from Federal research and development activities, and

(iii) is classified by the Nuclear Regulatory Commission as low-level radioactive waste.

CENTRAL COMPACT

S. 1581 and H.R. 3302

Sec. 4. (a) Nothing in this compact shall be construed to diminish or otherwise impair the jurisdiction, authority, or discretion of the U.S. Nuclear Regulatory Commission under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.), or any Agreement State under section 274 of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2021).

(b) Nothing in this compact shall be construed to confer any new authority on the States or the compact Commission to --

(i) regulate the packaging or transportation of radioactive wastes in a manner inconsistent with the regulations of the Nuclear Regulatory Commission or the U.S. Department of Transportation,

(ii) regulate health, safety, or environmental hazards from source, byproduct, or special nuclear material, or

(iii) inspect the activities of licensees of the Nuclear Regulatory Commission.

Sec. 5. (a) Article VI.a.6. shall be construed to exclude from the coverage of the compact only low-level radioactive waste from atomic energy defense activities of the Secretary of Energy, as defined in section 2(4) of the Low-Level Radioactive Waste Policy Act (42 U.S.C. 2021b)), and from Federal research and development activities.

(b) In exercising its authority under Article III.g. of the compact, the compact Commission shall promptly authorize the export of any waste from the region upon a finding by the Nuclear Regulatory Commission or an Agreement State that the export of such waste is required to protect the public health and safety.

STROM THURMOND, S.C., CHAIRMAN

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United States Senate

COMMITTEE ON THE JUDICIARY
WASHINGTON, D.C. 20510

November 8, 1983

Mr. G. Wayne Kerr
Director, Office of State Programs
Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Kerr;

Please find enclosed a list of questions for which the Committee would like to have responses for inclusion in the record of its hearing on the Southeast Interstate Low-Level Radioactive Waste Management Compact which was held in Columbia, South Carolina, on September 6 of this year. As you recall, there was insufficient time to question each witness, and I indicated that written questions would be submitted to you at a later date. The Committee would appreciate your responding to the following questions as soon as practicable:

1. Do you view the Southeast Compact as being in compliance with the provisions of the Low-Level Radioactive Waste Policy Act of 1980?

2. Do you believe that the 1986 date, after which Congressionally-approved compacts may exclude from their sites waste generated outside that region, should be altered in any way?

3. A number of interested parties have raised the issue of what might happen in 1986 should Congressionally-approved compacts with disposal sites decide to exclude waste from regions which did not yet have sites on-line. Do you believe that this is an issue most appropriately resolved by Congress or by the States themselves through interregional agreements?

4. In light of the possibility that other regions may not have new sites on-line by 1986, what alternatives do you believe are available to siteless regions to handle, within their own region, the low-level waste which they generate? For example, a recent GAO study has suggested that the States might store low-level waste in centrally located, warehouse-type facilities until new sites are

opened. Has the Nuclear Regulatory Commission encouraged this approach and offered to assist regions in pursuing such options?

5. Is it your view that Congress should take action on the compacts now pending before it or should Congressional consent to any of the compacts be delayed until all compacts have been submitted to the Congress?

6. What is your understanding of the provisions of the Southeast Compact regarding disposal of Federal waste at the southeast regional facility? Do you believe its provisions to be generally consistent with these of the Policy Act?

7. Article 4 of the compact gives the Southeast Commission the authority to enter into agreements for the import of waste into the region and the export of waste generated within the region. Do you view this provision as banning export of waste except with approval of the Commission?

8. Article 5, paragraph (B), of the Compact states in part the following:

> A host State may terminate or limit access to its regional facility if it determines that Congress has materially altered the conditions of this compact.

What, in your opinion, would be the legal effect of Congress giving its consent to such language?

9. Do you view any of the provisions of the Southeast Compact as becoming effective prior to Congressional consent? If so, which provisions? What activities, if any, do you believe are appropriate for compact commissions to udnertake prior to Congressional consent?

10. Please comment with regard to the following issues which have arisen during discussions with the States regarding disposal of Federally-generated waste at regional facilities:

a. which Federal generators should have access to regional sites;

b. whether Federal generators should be allowed to store waste at other regional sites without permission of the region within which the waste was generated;

c. whether there should be a percentage limitation on the amount of Federal waste which may be disposed of at a regional facility;

d. whether on-site inspection by the States of Federal generators should be allowed; and, if so, under what conditions;

e. whether Federal generators should be subject to the same regulations, requirements, fees, etc., that are applicable to commercial generators.

11. Do you believe that the provisions of the Southeast Compact are sufficient to clarify that the compact is not intended to alter the existing Federal/State regulatory framework for transportation and disposal of low-level waste?

12. Do you have any concerns with regard to any of the definitions contained in Article 2 of the compact?

In addition to your answers to the foregoing questions, it would also be very helpful to the Committee, as I indicated to you in a recent hearing on the Central Interstate Compact, to have the specific suggestions of the ~~Department of Energy~~ NRC for appropriate consent language for each of the four consent bills now pending in the Congress.

I thank you for your prompt attention to these requests. Also, I would like to thank you for your participation in the hearings which our Committee has held on the various compacts.

With kindest regards and best wishes,

Sincerely,

Strom Thurmond

Strom Thurmond
Chairman

ST:jqx

EXPORT AND IMPORT LLW COMPACT RESTRICTIONS

This responds to your request for further information and clarification regarding the need for NRC authority to override regional export and/or import bans for transporting low-level radioactive waste across regional compact boundaries, and your request for a discussion of NRC's current authority to require access to a disposal site. Some regional low-level waste compacts have export provisions that would bar members of the compact from exporting waste outside of the region after January 1, 1986, unless consent is given by the cognizant regional compact governing body. In the following discussion we cover whether the NRC has override authority under existing law to order the material to be exported from the site and stored or disposed of at a site within the jurisdiction of another regional compact authority, if the Commission determines that the low-level waste needs to be moved to another site promptly to protect public health and safety.

In any emergency situation, the Commission would expect the governing bodies of the Regional Compacts to cooperate with one another to prevent adverse effects on public health and safety. In the rare instance where health and safety concerns clearly mandate the need to move material from a site in one region to that in another, we would expect the governing body of the compact possessing the material to authorize export of material to an authorized recipient. The question of the exercise of NRC authority to override any compact-imposed bans on such shipments to alleviate an emergency situation would only arise if such a cooperative arrangement were not implemented at the initiative of the governing body.

ENCLOSURE 2

In such a case, Section 161 b of the Atomic Energy Act, 42 U.S.C. 2201(b), provides that the Commission could order a licensee to remove low-level waste from a site on an expeditious basis.[1] That section states that the Commission is authorized to issue such orders and instructions governing the possession and use of byproduct material as the Commission may deem necessary or desirable to promote the common defense and security or to protect health or to minimize danger to life or property.[2]

It is not clear, however, that the Commission has the authority to require another licensee to accept temporary storage of the low-level waste. Cooperative arrangements could probably be agreed to with another regional authority. If not, the Department of Energy (DOE) should be available to store the material on a temporary basis at one of its facilities. In that regard, Section 4(b)(1)(D) of the Low-Level Radioactive Waste Policy Act directs the Secretary of Energy to evaluate the capacity of the low-level radioactive waste disposal facilities owned and operated by the Department to provide interim storage for commercially generated low-level waste." This matter is discussed on pages 32-37 of the DOE document, DOE/NE-0015, which was prepared to comply with Sec. 4(b)(1) of the LLRWPA.

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[1] To clarify any ambiguities regarding the effect of the Low-Level Radioactive Waste Policy Act and the Regional Compacts upon NRC authority under the Atomic Energy Act the Commission has suggested that in giving its consent to the various compacts, Congress provide that compact governing bodies be required to authorize the export of waste from the region upon a finding by the NRC or an Agreement State that the export of such waste is required to protect the public health and safety.

[2] If the low-level waste disposal site is in an Agreement State, the State rather than the NRC would have the initial responsibility for protecting public health and safety. In the highly unlikely event that the Agreement State would not exercise this responsibility, under Section 274 j (2) of the Atomic Energy Act, 42 U.S.C. 2014 j (2), the Commission may, upon its own initiative, temporarily suspend all or part of its agreement with the State, without prior notice and hearing, and reassert regulatory authority over the low-level waste. Before doing so the Commission would be required to determine that an emergency situation exists which requires immediate action to protect the health and safety of persons either within or outside of the State and that the State has failed to take steps necessary to eliminate the cause of danger within a reasonable period of time.

FACTUAL SITUATIONS WHERE NRC-OVERRIDE OF COMPACT EXPORT RULES MAY BE REQUIRED

This is in response to your request for additional clarification regarding factual situations which might justify an NRC override of State compact rules regarding export of material from a compact low-level waste site.

First, there is currently one operating reactor which, as a result of U.S. Nuclear Regulatory Commission license requirements, ships its low-level waste to a dry disposal site in another region. The Dresden Unit 1 Nuclear Power Reactor, located in Morris, Illinois, (Docket No. 50-10) is required by Amendment 35 (dated 12/18/81) to Operating License DPR-2 at License Condition 2.G to ship wastes accumulated from chemical decontamination to an arid disposal site. Such a disposal site is not available in the region in which the reactor is located. As documented in NUREG-0686 (enclosed) dated 10/80, the Final Environmental Statement, Section 4.2.3, relates to the need for a dry disposal facility for use of chelating agents in the chemical decontamination process. The concern is the potential for leeching and subsequent transport of radionuclides into groundwater that can be enhanced by the presence of chelating agents. Similar licensing conditions, requiring low-level radioactive wastes from a reactor to be transported to a different region for disposal may be imposed on other reactor licensees in the future.

Another situation could involve the existence of a limit on quantities of particular mobile radionuclides such as C-14 or Tc-99 at a particular disposal facility. Such a limit would be imposed on the facility based on a site-specific environmental investigation. Assuming that the inventory for a particular facility may approach the established site limit, there may be a need to transfer waste containing the radionuclide of concern to another disposal facility.

A third situation could involve the temporary lack of disposal capacity for some or all classes of waste within a given compact. In such instances, a decision could possibly be made that it is preferable from a health and safety standpoint to transport the waste to another compact for disposal, rather than storing it within the compact until disposal capacity was available.

ENCLOSURE 3

TELEPHONE SURVEY OF NUCLEAR POWER PLANTS LOW LEVEL WASTE STORAGE CAPACITY

Facility	Do You Have LLW Storage Facilities?	How Many Years Storage Capacity?	Part 50.59 Or Part 30?	Are You Planning To Build Any?	For How Many Years Capacity?	How Long To Build 5-Year Capacity If Not Have Now?	If Had To Store For Seven Years, What Would Be Impact?
Arkansas 1	-	0	N/A	+ 3/86	5	1 year	expand
Oyster Creek	-	0	50.59	+ 12/85	5	0.75 year	expand, cost
Millstone 1/2/3	+	5 wet	50.59	+	2 dry	1-2 year	Part 30
Vermont Yankee	-	0	N/A	+	5	1 year	minor
Maine Yankee	+	1-2	50.59	+	5	0.75 year	Part 30
Monticello	+	2	50.59	-	N/A	2 year	expand, cost
Beaver Valley 1	-	0	N/A	+ 12/85	5	0.75 year	cost
Prairie Island	+	2	50.59	-	N/A	2 year	expand, cost
Nine Mile Point	+	5 (11)*	50.59	-	N/A	N/A	license change
H. B. Robinson	-	0	N/A	-	N/A	1 year	license change
Rancho Seco	+ 6/85	2.5	50.59	+	(10)*	1-1.5 year	expand
Oconee 1/2/3	-	0	N/A	+	2 ash	3-4 year	expand
McGuire	-	0	N/A	-	N/A	3-4 year	major building
Catawba 1/2	-	0	N/A	-	N/A	3-4 year	major building
Vogtle 1/2	-	0	N/A	-	N/A	1 year	Part 30
Virgil Summer	-	0	N/A	-	N/A	? year	Part 30, cost
Grand Gulf	-	0	N/A	-	N/A	2-3 year	cost
Yankee Rowe	+	5 (10)*	50.59	-	N/A	N/A	license change
Ginna	+	2	50.59	-	N/A	1.5 year	license change
Indian Point 2	-	0	N/A	-	N/A	N/A	N/A
Cooper	-	0	N/A	+	5	1.5 year	new structure
Davis Besse	-	0	N/A	+	5	2 year	expand
LaCrosse	+	3 dry - 1 wet	50.59	+ 12/85	5 dry	N/A	expand, cost
Palisades	+	1	50.59	-	N/A	1 year	cost, exposure
Big Rock Point	+	1	50.59	-	N/A	1 year	cost, exposure
Turkey Point 3/4	+	2 dry	50.59	-	N/A	2 year	Part 30, cost
Kewaunee	-	0	N/A	-	N/A	1.5 year	cost, exposure
Calvert Cliffs 1/2	-	0	N/A	+ 3/85	5	N/A	expand
Surry 1/2	+	1-2	50.59	-	N/A	1 year	expand, cost

+ - yes
- - no
wet - wet waste
dry - dry waste
ash - from incineration
* - greater than 5-year capacity
? - don't know
0 - less than 0.5 year

TELEPHONE SURVEY OF NUCLEAR POWER PLANTS LOW LEVEL WASTE STORAGE CAPACITY

Facility	Do You Have LLW Storage Facilities?	How Many Years Storage Capacity?	Part 50.59 Or Part 30?	Are You Planning To Build Any?	For How Many Years Capacity?	How Long To Build 5-Year Capacity If Not Have Now?	If Had To Store For Seven Years, What Would Be Impact?
Indian Point 3	-	0	N/A	+	5	1-1.5 year	expand
Crystal River	-	0	N/A	-	N/A	1-1.5 year	cost
Hatch 1/2	+	1.5-2	50.59	-	N/A	1 year	expand
Trojan	-	0	N/A	-	N/A	N/A	N/A
Pt. Beach 1/2	+	5	50.59	-	N/A	N/A	Part 30, cost
St. Lucie 1/2	+	2.5	50.59	+	5	0.5 year	expand
Fitzpatrick	-	0	N/A	+ 1/86	2	2 year	expand
Haddam Neck	+	1 wet	50.59	+	2 dry	1-2 year	Part 30
Peach Bottom 2/3	+ 4/85	2.5	50.59	+	5	1-2 year	expand
Ft. Calhoun	-	0	N/A	-	N/A	2 year	?
Browns Ferry	+	5	30	+	5	1.5 year	expand
Salem 1/2	-	0	N/A	-	N/A	?	Part 30
Arkansas 2	-	0	N/A	+ 12/85	5	N/A	expand
San Onofre 1	-	0	N/A	+	2	1 year	space limit
Ft. St. Vrain	+	5	neither	-	N/A	N/A	cost
Pilgrim	-	0	N/A	-	N/A	1-2 year	?
Dresden 1/2/3	+	0.5	50.59	+	2.5	1.5 year	expand
Quad Cities 1/2	+	0.5	50.59	+	2.5	1.5 year	expand
Zion	+	0.5	50.59	+	2.5	1.5 year	expand
LaSalle 1/2	+	1	plant lic.	+	2.5	1.5 year	expand
Byron 1/2	+	1	plant lic.	+	2-4	1.5 year	expand
Braidwood 1/2	+	1	plant lic.	+	2-4	1.5 year	expand
Comanche Peak	-	0	N/A	study	5	1-1.5 year	expand
Wolf Creek	+	0.5 - 0.75	plant lic.	+ 8/86	5	N/A	expand
Hope Creek	-	0	N/A	?	?	2 year	cost
Nine Mile Point 2	-	0	N/A	-	N/A	1 year	expand
River Bend	-	0	N/A	-	N/A	?	cost
Clinton	-	0	N/A	+	5 dry 2 wet	1.5 year	cost
Shoreham	-	0	N/A	+	3	1 year	expand

+ - yes
- - no
wet - wet waste
dry - dry waste
* - greater than 5-year capacity
? - don't know
0 - less than 0.5 year

TELEPHONE SURVEY OF NUCLEAR POWER PLANTS LOW LEVEL WASTE STORAGE CAPACITY

Facility	Do You Have LLW Storage Facilities?	How Many Years Storage Capacity?	Part 50.59 Or Part 30?	Are You Planning To Build Any?	For How Many Years Capacity?	How Long To Build 5-Year Capacity If Not Have Now?	If Had To Store For Seven Years, What Would Be Impact?
Limerick	-	0	N/A	?	~2.5	1.5 year	expand
WNP 2	+	1	plant lic.	?	?	2 year	?
Susquehanna 1/2	+	5 (8)*	30	-	N/A	N/A	?
Perry	-	0	N/A	+ 86	3	< 1 year	expand
Fermi 2	+	5	plant lic.	-	N/A	N/A	none
Callaway 1	+	2 wet	plant lic.	+	2 dry	1-2 year	cost, exposure
Farley 1/2	+	4	50.59	-	N/A	3 year	incinerate, expand
North Anna 1/2	at Surry	1-2	N/A	-	N/A	1 year	cost
Duane Arnold	-	0	N/A	+ 1/86	2.5	1 year	cost
TMI-1	+	0.5	N/A	+	5	0.75 year	expand
Brunswick 1/2	-	0	N/A	-	N/A	1-2 year	expand
Cook 1/2	+	0.5 - 1	N/A	-	N/A	0.75 year	license change
Beaver Valley 2							
Sequoyah 1/2							
Watts Bar 1/2							
San Onofre 2/3							
Diablo Canyon 1/2							
Waterford 3							
Palo Verde 1/2/3							
Seabrook 1/2							
Harris 1							
South Texas 1/2							

+ - yes
- - no
wet - wet waste
dry - dry waste
* - greater than 5-year capacity
? - don't know
< - less than
0 - less than 0.5 year

ENCLOSURE

Name of Project Manager:

Name of Plant:

Name of Contact:

1. Do you now have low level waste storage facilities?

2. How many years of storage capacity does this represent?

3. Did you proceed under Part 50.59 or Part 30 to build the facility?

4. Are you planning to construct any?

5. How many years of storage capacity would this represent?

6. If you have no storage now, or less than five years capacity, how long would it take to build or expand to provide five year storage facilities?

7. If you had to store for seven years, what would be the impact?

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

April 4, 1985

The Honorable Strom Thurmond, Chairman
Judiciary Committee
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

During the hearing on Low-Level Radioactive Waste Management Compacts on March 8, 1985 you requested the U.S. Nuclear Regulatory Commission provide responses to six questions for inclusion in the record. Pursuant to that request, we are providing herewith those responses.

With regard to your request for information and statistics on low-level radioactive waste storage capacity at nuclear power plant sites, our staff conducted a brief telephone survey of licensees and applicants for operating licenses that was incomplete at the time of the hearing. We have since completed the survey and it is enclosed as a part of our formal statement for the record.

With respect to the House proposed legislation, H.R. 1083, the Commission will supply comments in the near future.

Sincerely,

Edward Fay

Carlton Kammerer, Director
Office of Congressional Affairs

Enclosure:
As stated

QUESTION 1. IDENTIFY THE PROBLEMS YOU SEE WITH REQUIRING ON-SITE STORAGE FOR 5-10 YEARS? (IN REFERENCE TO POWER REACTOR STORAGE)

ANSWER.

SAFE STORAGE OF LOW-LEVEL RADIOACTIVE WASTE AT NUCLEAR POWER REACTOR SITES FOR 5-10 YEARS IS TECHNICALLY FEASIBLE. HOWEVER, THERE IS CURRENTLY NO SOUND SAFETY REASON FOR NRC TO RESTRICT A UTILITY'S ACTIONS FOR DEALING WITH LOW LEVEL WASTE BY REQUIRING STORAGE OF SUCH WASTE AT REACTOR SITES FOR 5-10 YEARS. STORAGE AT REACTOR SITES FOR AN OPEN-ENDED PERIOD OF TIME (AS WOULD BE THE CASE IF THERE WERE NO AVAILABLE DISPOSAL SITES) RAISES SEVERAL PUBLIC POLICY ISSUES ASSOCIATED WITH THE PERCEPTION THAT REACTOR SITES WOULD BECOME "DE FACTO" DISPOSAL SITES FOR LOW LEVEL WASTE.

PRESENT NRC POLICY PERMITS UTILITIES TO INSTALL FACILITIES FOR CONTINGENCY STORAGE OF SITE GENERATED WASTE FOR UP TO FIVE YEARS WITHOUT SPECIFIC NRC APPROVAL, IF SPECIFIED CONDITIONS ARE MET. WHEN THIS POLICY WAS ESTABLISHED IN 1981, THE FIVE-YEAR PERIOD WAS CONSIDERED REASONABLE IN TERMS OF: (A) CONTAINER INTEGRITY, RECOGNIZING THE CAPABILITY AT REACTOR SITES TO PROVIDE APPROPRIATE SURVEILLANCE AND TO REPACKAGE WASTE, IF NECESSARY; (B) PROVIDING OPERATIONAL FLEXIBILITY FOR THE REACTOR IF DISPOSAL CAPACITY WAS REDUCED OR DISRUPTED; AND (C) AVOIDING DISRUPTION OF THE PLANNING BY STATES FOR ADDITIONAL DISPOSAL CAPACITY. IF EXTENDED STORAGE AT REACTOR SITES IS MANDATED BY CONGRESS, THE COMMISSION WILL NEED TO MODIFY ITS POLICY GUIDANCE AND TECHNICAL REQUIREMENTS. IF LONG-TERM STORAGE REQUIRES NEW LICENSING ACTIONS, SUCH AS LICENSE AMENDMENTS, ADDITIONAL STAFF RESOURCES, OR A PEPROGRAMMING OF RESOURCES WOULD BE NECESSARY.

QUESTION 2. IF DOE WERE TO ACCEPT COMMERCIAL LOW-LEVEL RADIOACTIVE WASTE, HOW WOULD THE NUCLEAR REGULATORY COMMISSION'S JURISDICTION OVER POSSESSION OF COMMERCIAL NUCLEAR MATERIALS BE AFFECTED? WHAT OTHER REGULATORY AND LEGAL PROBLEMS OR IMPACTS

WOULD RESULT FROM COMMERCIAL RADIOACTIVE WASTE AT DOE SITES?

ANSWER.

UNDER PRESENT LAW, THE NRC WOULD HAVE NO JURISDICTION TO REGULATE THE STORAGE OF DISPOSAL OF COMMERCIAL LOW-LEVEL WASTE BY DOE. IF A LICENSEE SHIPPED THE WASTE TO A DOE SITE, NRC WOULD RETAIN JURISDICTION UNTIL IT ARRIVED AT THE DOE SITE. HOWEVER, IF DOE PICKED UP THE MATERIAL FROM THE LICENSEE, NRC JURISDICTION WOULD LAPSE WHEN DOE TOOK POSSESSION.

SHOULD CONGRESS DESIRE NRC TO REGULATE COMMERCIAL LOW LEVEL WASTE STORED OR DISPOSED OF AT DOE SITES, LEGISLATION WOULD BE REQUIRED. DOE SHOULD BE CONSULTED ON THE PROBLEMS IT MIGHT FORESEE FROM STORAGE OR DISPOSAL OF COMMERCIAL LOW LEVEL WASTE AT DOE SITES.

QUESTION 3. WOULD YOU PLEASE BRIEFLY DESCRIBE THE BASIC REGULATORY APPROACH OF THE NRC REGULATIONS THAT APPLY TO SHALLOW LAND BURIAL, AND IN PARTICULAR, DISCUSS THOSE REQUIREMENTS THAT MUST BE MET BY AN APPLICANT TO ENSURE THAT GROUNDWATER SUPPLIES ARE PROTECTED FROM CONTAMINATION?

ANSWER.

THE BASIC REGULATORY APPROACH OF NRC'S 10 CFR PART 61 REGULATION IS TO SET PERFORMANCE OBJECTIVES AND ALLOW LICENSE APPLICANTS THE FLEXIBILITY TO DETERMINE HOW TO DEMONSTRATE TO NRC THAT THEY WILL BE MET, RATHER THAN TO PRESCRIBE DETAILED REQUIREMENTS ALLOWING NO SUCH FLEXIBILITY. THESE PERFORMANCE OBJECTIVES ARE SET FORTH IN SUBPART C OF THE RULE. THE ONE THAT APPLIES MOST DIRECTLY TO GROUNDWATER, SECTION 61.41, PROVIDES THAT:

> "CONCENTRATIONS OF RADIOACTIVE MATERIAL WHICH MAY BE RELEASED TO THE GENERAL ENVIRONMENT IN GROUND WATER, SURFACE WATER, AIR, SOIL, PLANTS, OR ANIMALS MUST NOT RESULT IN AN ANNUAL

DOSE EXCEEDING AN EQUIVALENT OF 25 MILLIREMS TO THE WHOLE BODY, 75 MILLIREMS TO THE THYROID, AND 25 MILLIREM TO ANY OTHER ORGAN OF ANY MEMBER OF THE PUBLIC. REASONABLE EFFORT SHOULD BE MADE TO MAINTAIN RELEASES OF RADIOACTIVITY IN EFFLUENTS TO THE GENERAL ENVIRONMENT AS LOW AS IS REASONABLY ACHIEVABLE."

QUESTION 3.

THE RULE ALSO CONTAINS SEVERAL SPECIFIC ADDITIONAL TECHNICAL REQUIREMENTS THAT DEAL WITH GROUNDWATER PROTECTION AND MITIGATION OF POTENTIAL GROUNDWATER CONTAMINATION, HOWEVER:

61.50 (A)(5) - SITE MUST BE WELL-DRAINED AND OUT OF AREAS OF FLOODING OR FREQUENT PONDING.

61.50 (A)(7) - WASTE MUST BE BURIED ABOVE THE WATER TABLE.

61.50 (A)(8) - HYDROGEOLOGIC UNIT USED FOR DISPOSAL MUST NOT DISCHARGE GROUNDWATER TO THE SURFACE WITHIN THE DISPOSAL SITE.

61.51 (A)(4) - COVERS MUST BE DESIGNED TO MINIMIZE WATER INFILTRATION.

61.53 (D) - MONITORING SYSTEM MUST BE CAPABLE OF EARLY DETECTION OF RADIONUCLIDE RELEASES BEFORE THEY LEAVE THE SITE BOUNDARY.

THESE REQUIREMENTS, COMBINED WITH OTHER REQUIREMENTS FOR SITING, AND PACKAGING, DISPOSAL SITE OPERATION, AND STABILITY OF WASTE FORM, WERE PUT IN PART 61 IN RECOGNITION OF THE FACT THAT VOLUMES OF WATER IN CONTACT WITH THE WASTE WOULD BE THE PRIMARY DRIVING FORCE FOR RADIONUCLIDE RELEASE IN THE FORM OF LEACHATE FROM THE DISPOSED WASTE.

QUESTION 4. WHAT OPPORTUNITIES UNDER YOUR REGULATIONS FOR MEMBERS OF THE INTERESTED PUBLIC IN AREAS NEAR A PROPOSED LOW-LEVEL RADIOACTIVE WASTE DISPOSAL SITE TO PARTICIPATE IN THE LICENSING PROCESS, AND TO HAVE THEIR CONCERNS ADDRESSED PRIOR TO THE ISSUANCE OF A LICENSE BY THE NRC?

ANSWER.

INTERESTED MEMBERS OF THE PUBLIC HAVE SEVERAL WAYS TO ASSURE THAT THEIR CONCERNS ARE ADDRESSED PRIOR TO ISSUANCE OF AN NRC LICENSE FOR A LOW-LEVEL WASTE DISPOSAL SITE. THEY MAY BECOME INTERESTED PARTIES TO NRC LICENSING PROCEEDINGS UNDER OUR 10 CFR PART 2 RULES OF PRACTICE FOR DOMESTIC LICENSING PROCEEDINGS. THEY MAY COMMUNICATE THEIR VIEWS THROUGH THEIR RESPECTIVE STATE OR TRIBAL GOVERNMENTS UNDER SUBPART F OF OUR 10 CFR PART 61 LICENSING RULE FOR LAND DISPOSAL OF LOW-LEVEL WASTES. THEY MAY ALSO PARTICIPATE IN NRC ENVIRONMENTAL REVIEWS UNDER 10 CFR PART 51, WHICH SETS FORTH LICENSING AND REGULATORY POLICY AND PROCEDURES FOR ENVIRONMENTAL PROTECTION.

QUESTION 5. WHAT IS THE CURRENT STATUS OF YOUR EFFORTS TO COORDINATE YOUR REGULATORY RESPONSIBILITIES WITH THE TWO INITIATIVES THAT EPA IS PURSUING: (A) THE DEVELOPMENT OF A "GENERALLY APPLICABLE ENVIRONMENTAL STANDARD" FOR LOW-LEVEL WASTE SITES; AND (B) THE APPLICATION OF RCRA REQUIREMENTS TO THESE SITES?

ANSWER.

THERE IS UNCERTAINTY ABOUT WHAT EPA MAY DO ON BOTH THE STANDARDS AND RCRA.

CONCERNING THE COMPATIBILITY OF THE FINAL EPA STANDARDS WITH EXISTING NRC REGULATIONS FOR LOW-LEVEL WASTE DISPOSAL, EPA STATED IN ITS MARCH 18, 1982 COMMENT LETTER TO THE COMMISSION ON OUR PROPOSED 10 CFR PART 61 LICENSING RULE THAT:

> "THE 25 MILLIREM PER YEAR [LIMIT FOR INDIVIDUAL EXPOSURE AT THE SITE BOUNDARY] IS IN THE CORRECT RANGE OF VALUES IF, AS THE NRC INDICATES, THAT RANGE INCLUDES 1 TO 25 MILLIREM PER YEAR.

NRC IS CURRENTLY MONITORING EPA EFFORTS TO DEVELOP RADIATION RELEASE STANDARDS FOR LOW-LEVEL WASTE DISPOSAL. EPA PUBLISHED AN ADVANCED NOTICE OF PROPOSED RULEMAKING ON AUGUST 31, 1983 CONCERNING ENVIRONMENTAL RADIATION PROTECTION STANDARDS FOR LOW-LEVEL RADIOACTIVE WASTE DISPOSAL. IT IS OUR UNDERSTANDING THAT EPA INTENDS TO PUBLISH PROPOSED DRAFT STANDARDS FOR PUBLIC COMMENT IN THE SECOND QUARTER OF FY 86 AND TO HAVE THE FINAL STANDARDS COMPLETED APPROXIMATELY ONE YEAR LATER. IF THE STANDARD DIFFERS SIGNIFICANTLY FROM THAT PRESUMED IN OUR 10 CFR PART 61 LICENSING RULE, WE WILL HAVE TO UNDERTAKE THE NECESSARY RULEMAKING AND GUIDANCE DEVELOPMENT TO CONFORM OUR REGULATIONS TO THE STANDARD.

THERE IS ALSO CONSIDERABLE UNCERTAINTY OVER THE APPLICABILITY OF THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) TO LICENSED LOW-LEVEL WASTE DISPOSAL. AMONG OTHER THINGS, THIS UNCERTAINTY CONCERNS THE TYPES OF ADDITIONAL REQUIREMENTS THAT EPA, OR A STATE AGENCY WITH DELEGATED RCRA AUTHORITY FROM EPA, MIGHT REQUIRE OF PERSONS LICENSED BY NRC OR AN AGREEMENT STATE AGENCY FOR LOW-LEVEL RADIOACTIVE WASTE DISPOSAL.

CLARIFYING LEGISLATION WOULD BE THE ULTIMATE WAY TO ELIMINATE THESE UNCERTAINTIES. IT SHOULD BE NOTED, HOWEVER, THAT NRC HAS STUDIES UNDERWAY TO DETERMINE THE EXTENT OF HAZARDOUS AND TOXIC CONSTITUENTS INCIDENT TO LOW-LEVEL RADIOACTIVE WASTES. BASED ON THE RESULTS OF THESE STUDIES, NRC WILL ATTEMPT TO NEGOTIATE A MEMORANDUM OF UNDERSTANDING WITH EPA TO ELIMINATE TO THE EXTENT POSSIBLE RCRA-RELATED UNCERTAINTIES AT THE FEDERAL LEVEL. IT SHOULD BE NOTED, HOWEVER, THAT A MEMORANDUM OF UNDERSTANDING BETWEEN TWO FEDERAL AGENCIES MAY NOT RESOLVE UNCERTAINTIES ARISING

FROM DIFFERENCES IN STATE AGENCY JURISDICTION IN STATES THAT ARE DELEGATED AUTHORITY BOTH FROM EPA FOR RCRA AND FROM NRC FOR THE REGULATION OF RADIOACTIVE WASTE DISPOSAL.

QUESTION 6. IF COMPACTS WERE INTERESTED IN ADOPTING MORE STRINGENT REQUIREMENTS THAN THOSE ESTABLISHED BY THE NRC, OR IF THEY WERE INTERESTED IN PURSUING ALTERNATIVES TO SHALLOW LAND BURIAL, WOULD THE NRC REGULATIONS ALLOW THIS, AND ARE YOU IN A POSITION TO RESPOND TO STATE INQUIRIES ABOUT THESE VARIOUS ALTERNATIVES?

ANSWER.

WITH RESPECT TO FACILITIES LOCATED IN NON-AGREEMENT STATES, THE NRC HAS REGULATORY AUTHORITY TO ESTABLISH THE NECESSARY STANDARDS TO PROTECT THE PUBLIC HEALTH AND SAFETY AND LICENSE THE SITE.

THE COMMISSION HAS A LESSER ROLE WHEN A DISPOSAL FACILITY IS SITED IN AN AGREEMENT STATE. IN AN AGREEMENT STATE A STATE AGENCY LICENSES AND REGULATES THE FACILITY. WHILE THE COMMISSION STRONGLY ENCOURAGES THE DEVELOPMENT AND IMPLEMENTATION OF STANDARDS AND REQUIREMENTS BY AGREEMENT STATES THAT ARE, ON FUNDAMENTAL SAFETY MATTERS, SIMILAR TO THOSE OF NRC, AGREEMENT STATES ARE NOT GENERALLY PRECLUDED BY FEDERAL LAW FROM ADOPTING AND ENFORCING MORE STRINGENT REQUIREMENTS. NRC DOES HAVE RESIDUAL AUTHORITY TO TERMINATE OR SUSPEND AN INDIVIDUAL STATE AGREEMENT, BUT ONLY IF THIS IS NECESSARY TO PROTECT PUBLIC HEALTH AND SAFETY OR TO ENSURE COMPLIANCE WITH OTHER REQUIREMENTS IN THE ATOMIC ENERGY ACT, AND HAS AUTHORITY TO REMOVE AN ENTIRE CATEGORY OF WASTE DISPOSAL FROM ANY STATE RADIOLOGICAL SAFETY REGULATION, BUT ONLY IF THE HAZARDS OR POTENTIAL HAZARDS OF THE MATERIAL ARE SUCH AS TO REQUIRE NRC REGULATION.

INTERSTATE WASTE COMPACTS GIVE RISE TO THE POSSIBILITY THAT AN ADDITIONAL ENTITY WOULD BE CREATED WITH REGULATORY AUTHORITY OVER WASTE DISPOSAL, IN ADDITION TO NRC AND, IF APPLICABLE, THE AGREEMENT STATE AGENCY. WE BELIEVE THAT THIS KIND OF DUPLICATE

REGULATION WOULD BE UNDESIRABLE. THE COMMISSION BELIEVES THAT IN RATIFYING THE WASTE COMPACTS, CONGRESS SHOULD EXPLICITLY PROVIDE THAT, EXCEPT FOR THE LIMITED GRANT OF AUTHORITY TO EXCLUDE CERTAIN WASTE GRANTED BY SECTION 4(E)(2)(B) OF THE LOW LEVEL RADIOACTIVE WASTE POLICY ACT, THE EXISTING DIVISION OF LICENSING AND REGULATORY AUTHORITY OVER LOW LEVEL RADIOACTIVE WASTE BETWEEN THE FEDERAL GOVERNMENT AND THE STATES REMAINS INTACT.

ALTHOUGH ALLOCATION OF RESOURCES MAY CONSTRAIN NRC'S ABILITY TO PROVIDE THIS SERVICE, NRC IS IN A POSITION TO RESPOND TO STATE INQUIRIES ABOUT ALTERNATIVE TECHNOLOGIES, ON THE BASIS THAT OUR 10 CFR 61 REGULATION SETS FORTH PROCEDURAL REQUIREMENTS AND PERFORMANCE OBJECTIVES FOR LICENSING ALL LAND DISPOSAL ALTERNATIVES, PLUS GENERAL TECHNICAL REQUIREMENTS APPLICABLE TO NEAR SURFACE, METHODS, WHICH INVOLVE DISPOSAL AT DEPTHS OF 30 METERS OR LESS. THE REGULATION IS FLEXIBLE, TO AVOID POSSIBLE PRECLUSION OF ALTERNATIVE DISPOSAL METHODS, AND NO SPECIFIC DISPOSAL METHODOLOGIES ARE ESTABLISHED OR REQUIRED. SEVERAL ALTERNATIVES TO SHALLOW LAND BURIAL WERE INVESTIGATED AS PART OF THE RULEMAKING PROCESS, AND PORTIONS OF THE RULE HAVE BEEN RESERVED TO ACCOMMODATE THE FUTURE DEVELOPMENT OF ALTERNATIVE TECHNOLOGIES. THE COMMISSION IS CONSIDERING DIRECTING STAFF TO DEVELOP ADDITIONAL GUIDANCE FOR ALTERNATIVE DISPOSAL METHODS.

TELEPHONE SURVEY OF NUCLEAR POWER PLANT

LOW-LEVEL WASTE STORAGE CAPACITY

In order to respond to Congressional questions concerning low-level waste storage capacity at nuclear power plant sites, the staff conducted a brief telephone survey of licensees and applicants for operating licenses. The information was acquired informally and not as a result of any formal reporting requirement of licensees, and as such is subject to some uncertainty and change.

In brief, of those surveyed to date, 40 sites have storage capacity of less than six months. Of the 40 sites which have greater capacity, 7 have less than 1 year, 9 have 1 year, 14 have 2 years, and 10 have 4 to 5 years.

Most of the storage facilities were built pursuant to Part 50.59 without NRC approval. Several were approved by NRC under the operating license and three were approved by NRC under Part 30.

Sixteen licensees/applicants plan to either increase or build new storage facilities for 2 to 4 years of storage capacity, and 20 for 5 year capacity.

According to licensees, if the need for seven year storage capacity arose, impacts would include license amendments, new licenses, expansion of facilities already built, increased financial burdens, increased potential for personnel radiation exposure, and space limitations.

ENCLOSURE 3

TELEPHONE SURVEY OF NUCLEAR POWER PLANT LOW-LEVEL WASTE STORAGE CAPACITY

Facility	Do You Have LLW Storage Facilities?,	How Many Years Storage Capacity?	Part 50.59 Or Part 30?	Are You Planning To Build Any?	For How Many Years Capacity?	How Long To Build 5-Year Capacity If Not Have Now?	If Had To Store For Seven Years, What Would Be Impact?
Arkansas 1	no	0	N/A	yes 3/86	5	1 year	expand
Oyster Creek	no	0	50.59	yes 12/85	5	0.75 year	expand, cost
Millstone 1/2/3	yes	5 wet	50.59	yes	2 dry	1-2 year	Part 30
Vermont Yankee	no	0	N/A	yes	5	1 year	minor
Maine Yankee	yes	1-2	50.59	yes	5	0.75 year	Part 30
Monticello	yes	2	50.59	no	N/A	2 year	expand, cost
Beaver Valley 1	no	0	N/A	yes 12/85	5	0.75 year	cost
Prairie Island	yes	2	50.59	no	N/A	2 year	expand, cost
Nine Mile Point	yes	5 (11)*	50.59	no	N/A	N/A	license change
H. B. Robinson	no	0	N/A	no	N/A	1 year	license change
Rancho Seco	yes 6/85	2.5	50.59	yes	(10)*	1-1.5 year	expand
Oconee 1/2/3	no	0	N/A	yes	2 ash	3-4 year	expand
McGuire	no	0	N/A	no	N/A	3-4 year	major building
Catawba 1/2	no	0	N/A	no	N/A	3-4 year	major building
Vogtle 1/2	no	0	N/A	no	N/A	1 year	Part 30
Virgil Summer	no	0	N/A	no	N/A	2 year	Part 30, cost
Grand Gulf	no	0	N/A	no	N/A	2-3 year	cost

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wet - wet waste
dry - dry waste
ash - from incineration
* - greater than 5-year capacity
** - information not available for testimony delivered 3/8/85
0 - less than 0.5 year
cost - large financial outlay
Part 30 - need a Part 30 license
exposure - increased personnel exposure

Facility	Do You Have LLW Storage Facilities?	How Many Years Storage Capacity?	Part 50.59 Or Part 30?	Are You Planning To Build Any?	For How Many Years Capacity?	How Long To Build 5-Year Capacity If Not Have Now?	If Had To Store For Seven Years, What Would Be Impact?
Yankee Rowe	yes	5 (10)*	50.59	no	N/A	N/A	license change
Ginna	yes	2	50.59	no	N/A	1.5 year	license change
Indian Point 2	no	0	N/A	no	N/A	N/A	study**
Cooper	no	0	N/A	yes	5	1.5 year	new structure
Davis Besse	no	0	N/A	yes	5	2 year	expand
LaCrosse	yes	3 dry - 1 wet	50.59	yes 12/85	5 dry	N/A	expand, cost
Palisades	yes	1	50.59	no	N/A	1 year	cost, exposure
Big Rock Point	yes	1	50.59	no	N/A	1 year	cost, exposure
Turkey Point 3/4	yes	2 dry	50.59	no	N/A	2 year	Part 30, cost
Kewaunee	no	0	N/A	no	N/A	1.5 year	cost, exposure
Calvert Cliffs 1/2	no	0	N/A	yes 3/85	5	N/A	expand
Surry 1/2	yes	1-2	50.59	no	N/A	1 year	expand, cost
Indian Point 3	no	0	N/A	yes	5	1-1.5 year	expand
Crystal River	no	0	N/A	no	N/A	1-1.5 year	cost
Hatch 1/2	yes	1.5-2	50.59	no	N/A	1 year	expand
Trojan	no	0	N/A	no	N/A	N/A	space limit**
Pt. Beach 1/2	yes	5	50.59	no	N/A	N/A	Part 30, cost
St. Lucie 1/2	yes	2.5	50.59	yes	5	0.5 year	expand
Fitzpatrick	no	0	N/A	yes 1/86	2	2 year	expand
Haddam Neck	yes	1 wet	50.59	yes	2 dry	1-2 year	Part 30
Peach Bottom 2/3	yes 4/85	2.5	50.59	yes	5	1-2 year	expand
Ft. Calhoun	no	0	N/A	no	N/A	2 year	cost, exposure, buil
Browns Ferry	yes	5	30	yes	5	1.5 year	expand

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Facility	Do You Have LLW Storage Facilities?	How Many Years Storage Capacity?	Part 50.59 Or Part 30?	Are You Planning To Build Any?	For How Many Years Capacity?	How Long To Build 5-Year Capacity If Not Have Now?	If Had To Store For Seven Years, What Would Be Impact?
Salem 1/2	no	0	N/A	study**	study**	study**	Part 30
Arkansas 2	no	0	N/A	yes 12/85	5	N/A	expand
San Onofre 1	no	0	N/A	yes	2	1 year	space limit
Ft. St. Vrain	yes	5	neither	no	N/A	N/A	cost
Pilgrim	no	0	N/A	no	N/A	1-2 year	study**
Dresden 1/2/3	yes	0.5	50.59	yes	2.5	1.5 year	expand
Quad Cities 1/2	yes	0.5	50.59	yes	2.5	1.5 year	expand
Zion	yes	0.5	50.59	yes	2.5	1.5 year	expand
LaSalle 1/2	yes	1	plant lic.	yes	2.5	1.5 year	expand
Byron 1/2	yes	1	plant lic.	yes	2-4	1.5 year	expand
Braidwood 1/2	yes	1	plant lic.	yes	2-4	1.5 year	expand
Comanche Peak	no	0	N/A	study	5	1-1.5 year	expand
Wolf Creek	yes	0.5 - 0.75	plant lic.	yes 8/86	5	N/A	expand
Hope Creek	no	0	N/A	no**	N/A**	2 year	cost
Nine Mile Point 2	no	0	N/A	no	N/A	1 year	expand
River Bend	no	0	N/A	no	N/A	unknown**	cost, build
Clinton	no	0	N/A	yes	5 dry 2 wet	1.5 year	cost
Shoreham	no	0	N/A	yes	3	1 year	expand
Limerick	no	0	N/A	study**	2.5	1.5 year	expand
WNP 2	yes	1	plant lic.	study**	study**	2 year	minor**
Susquehanna 1/2	yes	5 (8)*	30	no	N/A	N/A	Part 30, cost**
Perry	no	0	N/A	yes 86	3	< 1 year	expand

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cost - large financial outlay
Part 30 - need a Part 30 license
exposure - increased personnel exposure

Facility	Do You Have LLW Storage Facilities?	How Many Years Storage Capacity?	Part 50.59 Or Part 30?	Are You Planning To Build Any?	For How Many Years Capacity?	How Long To Build 5-Year Capacity If Not Have Now?	If Had To Store For Seven Years, What Would Be Impact?
Fermi 2	yes	5	plant lic.	no	N/A	N/A	none
Callaway 1	yes	2 wet	plant lic.	yes	2 dry	1-2 year	cost, exposure
Farley 1/2	yes	4	50.59	no	N/A	3 year	incinerate, expand
North Anna 1/2	at Surry	1-2	N/A	no	N/A	1 year	cost
Duane Arnold	no	0	N/A	yes 1/86	2.5	1 year	cost
TMI-1	yes	0.5	N/A	yes	5	0.75 year	expand
Brunswick 1/2	no	0	N/A	no	N/A	1-2 year	expand
Cook 1/2	yes	0.5 - 1	N/A	no	N/A	0.75 year	license change
Beaver Valley 2**	no	N/A	N/A	yes	2	1.5 year	expand
Sequoyah 1/2**	yes	2	30	no	N/A	2**	cost, exposure, land
Watts Bar 1/2**	no	N/A	N/A	no	N/A	2**	Part 30, same as abov
San Onofre 2/3**	no	N/A	N/A	yes	5	2 year	cost, space
Diablo Canyon 1/2**	yes	1	50.34-35	yes	2-3	1 year	cost
Waterford 3**	yes	0.75	plant lic.	yes	2.5	1.5 year	cost
Palo Verde 1/2/3**	no	N/A	N/A	yes 86	2.5	2 year	cost, Part 30
Seabrook 1/2**	no	N/A	N/A	yes	(6)*	unknown**	expand
Harris 1**	yes	2.5	plant lic.	study	5	1.5 year	expand
South Texas 1/2**	yes	<1	plant lic.	study	study**	study**	study**

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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

CHAIRMAN

May 17, 1985

The Honorable Strom Thurmond
Chairman, Committee on the Judiciary
United States Senate
Washington, DC 20510

Dear Mr. Chairman:

Thank you for your recent letter dated April 17, 1985 concerning low level radioactive waste Compacts. Enclosed are responses to the additional questions for inclusion in the March 8, 1985 Hearing record.

I trust this information is responsive to your needs. If the Commission can be of further help, please do not hesitate to contact me.

Sincerely,.

Nunzio Palladino

Nunzio J. Palladino

Enclosure:
As stated

cc: Sen. Joseph Biden

QUESTION 1. ONE MAJOR ELEMENT OF A TRANSITION PERIOD IS VOLUME LIMITATION. IF A NATIONAL CAP WERE SET, IT WOULD BE NECESSARY FOR A GOVERNMENTAL BODY TO ADMINISTER THE CAP. SHOULD NRC OVERSEE VOLUME ALLOCATIONS UNDER A CAP? WOULD IT BE FEASIBLE TO HAVE EACH STATE OR REGION APPORTION VOLUMES AMONG GENERATORS, SUBJECT TO PASSIVE NRC OVERSIGHT? WHAT PROBLEMS DO YOU FORESEE IN A TEMPORARY GRANT OF THIS NEW REGULATORY AUTHORITY TO THE STATES? HOW MUCH TIME WOULD BE INVOLVED IN DEVELOPING THE NECESSARY REGULATORY FRAMEWORK? WHAT WOULD BE THE COST FOR NRC TRANSITION OVERSIGHT, BOTH ACTIVE AND PASSIVE? SHOULD NOT STATES HAVE PRIMARY AUTHORITY, PERHAPS UNDER NRC AGREEMENT, TO ADMINISTER AND REGULATE DISPOSAL OF THESE WASTES GENERATED WITHIN THEIR BORDERS?

ANSWER.

WITH REGARD TO LOW-LEVEL RADIOACTIVE WASTE, THE COMMISSION DOES NOT BELIEVE THAT EITHER THE NRC OR NRC AGREEMENT STATE REGULATORY PROGRAMS SHOULD BE INVOLVED IN ALLOCATING WASTE DISPOSAL CAPACITY AMONG COMPETING LICENSEES. THIS IS IN KEEPING WITH THE SIMILAR NRC POSITION ESTABLISHED DURING DEVELOPMENT OF THE NUCLEAR WASTE POLICY ACT. AT THAT TIME THE COMMISSION MAINTAINED THAT THE NRC WAS NOT THE APPROPRIATE AGENCY TO DETERMINE WHEN A UTILITY WAS ELIGIBLE FOR INTERIM STORAGE OF SPENT FUEL AT A FEDERAL STORAGE FACILITY UNDER THE NUCLEAR WASTE POLICY ACT.

THE NRC BELIEVES FEDERAL LAW IS CLEAR THAT PROVIDING FOR LOW-LEVEL RADIOACTIVE WASTE DISPOSAL CAPACITY IS A RESPONSIBILITY OF THE STATE IN WHICH THE GENERATOR OF THE WASTE IS LOCATED. THE NRC CONTINUES TO BELIEVE THAT LOW-LEVEL WASTE SHOULD BE DISPOSED OF AS GENERATED. LOW-LEVEL WASTE STORAGE MAY PROVIDE THE POTENTIAL FOR UNNECESSARY RADIATION EXPOSURE. HOWEVER, RECOGNIZING THE POTENTIALLY SERIOUS SITUATION SHOULD CURRENT DISPOSAL CAPACITY BE CURTAILED, THE NRC INTENDS TO RESPOND TO APPLICATIONS FROM ITS LICENSEES TO TEMPORARILY PROVIDE FOR ALTERNATIVE WASTE MANAGEMENT PRACTICES INCLUDING STORAGE, SHOULD DISPOSAL SITE ACCESS BE

RESTRICTED. SHOULD A PARTICULAR LICENSEE NOT BE ABLE TO MANAGE ITS WASTE SAFELY THROUGH A PERIOD OF DISPOSAL SITE RESTRICTIONS, WE WOULD EXPECT THE LICENSEE TO APPEAL TO THE RESPONSIBLE ENTITY--THE STATE--TO PROVIDE FOR INTERIM WASTE STORAGE PENDING DISPOSAL. IN THE EVENT THE STATE IS UNABLE TO PROVIDE FOR EITHER INTERIM STORAGE OR DISPOSAL, AND IF CONTINUED LICENSEE OPERATIONS POSE A SIGNIFICANT HEALTH AND SAFETY PROBLEM, THE NRC WILL HAVE LITTLE OPTION OTHER THAN TO CAUSE THE LICENSEE TO RESTRICT OR CEASE WASTE GENERATION. THE COMMISSION RECOGNIZES SUCH ACTIONS MAY DENY ESSENTIAL SERVICES TO THE RESIDENTS OF THE STATE. HOWEVER, IN DISCHARGING ITS RESPONSIBILITY TO PROTECT PUBLIC HEALTH AND SAFETY, THE REGULATORY OPTIONS AVAILABLE TO THE NRC ARE LIMITED.

QUESTION 2. WHAT STEPS OR EVENTS, IF ANY, IN THE LICENSING OF A LOW-LEVEL WASTE DISPOSAL FACILITY MIGHT ALLOW FOR EXPEDITED, OR FAST-TRACKING, METHODS IN ORDER THAT NEW SITES MAY BE DEVELOPED MORE QUICKLY WITHOUT AFFECTING HEALTH OR SAFETY CONCERN?

ANSWER.

THE NRC STAFF BELIEVES A NUMBER OF STEPS MAY BE TAKEN BY DISPOSAL SITE DEVELOPERS TO EXPEDITE TIMELY DEVELOPMENT OF NEW LOW-LEVEL WASTE DISPOSAL FACILITIES. THE STEPS OUTLINED BELOW WOULD PRIMARILY OCCUR BEFORE SUBMITTAL OF A LICENSE APPLICATION.

o WORK CLOSELY WITH APPROPRIATE STATE AND LOCAL OFFICIALS AND OTHER INTERESTED PARTIES TO IDENTIFY AND RESOLVE CONTROVERSIAL MATTERS (E.G., SITING AND LAND USE CONCERNS, TRANSPORTATION ROUTES, IMPACT ON LOCAL SERVICES) ASSOCIATED WITH POTENTIAL DISPOSAL SITE DEVELOPMENT. RESOLUTION OF MAJOR CONCERNS PRIOR TO THE LICENSING PHASE MAY REDUCE CONTINUING CONTROVERSY AND PROTRACTED LITIGATION IN THE LICENSING PHASE, AND ALSO HELP FOCUS THE LICENSING PROCEEDINGS ON TECHNICAL HEALTH AND SAFETY MATTERS.

o IDENTIFY SEVERAL CANDIDATE DISPOSAL SITES EARLY ON, AND UNDERTAKE LIMITED SITE CHARACTERIZATION WORK AT SEVERAL SITES SIMULTANEOUSLY. THIS SHOULD PROVIDE A STRONGER BASIS FOR SELECTING A PREFERRED SITE FOR LICENSING PURPOSES THAN A PROCESS BASED ON SITE-SPECIFIC WORK AT ONLY ONE LOCATION. AVAILABILITY OF DETAILED INFORMATION ON SEVERAL SITES WOULD ALSO REDUCE DELAYS IN THE EVENT CHARACTERIZATION RESULTS EXCLUDED A SINGLE CANDIDATE SITE FROM FURTHER CONSIDERATION.

o IDENTIFY ANY TECHNICAL OR REGULATORY UNCERTAINTIES AFFECTING LICENSING AND SEEK PRE-LICENSING GUIDANCE FROM THE APPROPRIATE REGULATORY ENTITY. THIS WOULD PROVIDE AN OPPORTUNITY FOR EARLY CONSIDERATION AND RESOLUTION OF POTENTIAL LICENSING ISSUES; AND FOR REGULATORY STAFF TO DEVELOP TECHNICAL POSITIONS ON QUESTIONS WHICH MAY NOT HAVE EMERGED PREVIOUSLY. THIS STEP WOULD BE PARTICULARLY APPROPRIATE FOR DEVELOPERS SEEKING TO DEVELOP AN ALTERNATIVE TO SHALLOW LAND BURIAL.

o DEVELOP A THOROUGHLY DOCUMENTED, HIGH QUALITY LICENSE APPLICATION BACKED BY APPROPRIATE TECHNICAL STUDIES. THIS WILL HELP ENSURE THAT LICENSING PROCEEDINGS ARE NOT DELAYED BY A LACK OF INFORMATION OR INCOMPLETE ANALYSIS BY THE APPLICANT.

THE NRC STAFF ESTIMATES THAT THE AVERAGE LOW-LEVEL WASTE DISPOSAL SITE LICENSE APPLICATION WILL REQUIRE TWO YEARS TO REVIEW. THE ACTUAL TIME MAY BE SHORTER OR LONGER DEPENDING ON THE TECHNICAL QUESTIONS RAISED, AND THE DEGREE OF CONTROVERSY ATTENDING FACILITY SITING. FOR FACILITIES LICENSED BY NRC, OPPORTUNITIES FOR PUBLIC COMMENT AND FORMAL HEARINGS ARE PROVIDED BY LAW. REQUIREMENTS OF THE FEDERAL ADMINISTRATIVE PROCEDURE ACT WOULD APPLY. WE DO NOT BELIEVE IT WOULD BE POSSIBLE TO SIGNIFICANTLY SHORTEN THE REVIEW PERIOD WITHOUT AFFECTING HEALTH AND SAFETY CONCERNS. FOR THIS REASON, WE HAVE STRESSED THE IMPORTANCE OF PRE-LICENSING ACTIONS BY SITE DEVELOPERS.

FOR NRC AGREEMENT STATES, STATE LAW WOULD DETERMINE PROCEDURAL REQUIREMENTS FOR LICENSE REVIEW. THE PERIOD NOTED ABOVE MAY VARY DEPENDING ON STATE LAWS AND RESOURCE AVAILABILITY.

QUESTION 3. WITH REGARD TO MANDATORY UTILITY ON-SITE STORAGE UNDER CURRENT TECHNOLOGY, WHAT IS A REASONABLE TIME FOR DEVELOPMENT AND CONSTRUCTION OF ON-SITE FACILITIES?

ANSWER.

IN A RECENT TELEPHONE SURVEY BY NRC STAFF, UTILITIES ESTIMATED THAT IT WOULD GENERALLY TAKE EIGHTEEN MONTHS TO TWO YEARS TO DEVELOP AND CONSTRUCT ON-SITE LOW-LEVEL WASTE STORAGE FACILITIES. THIS PERIOD IS BASED ON ESTABLISHMENT OF FACILITIES FOR UP TO FIVE YEARS WASTE GENERATION, AS ALLOWED FOR UNDER EXISTING LICENSING POLICY. STATE OR REGIONAL DISPOSAL FACILITIES, RATHER THAN MANDATORY UTILITY STORAGE, ARE CONSIDERED PREFERABLE FROM A HEALTH AND SAFETY STANDPOINT.

QUESTION 4. CURRENTLY, COMPACT REGIONS OCCUPY A HYBRID STATUS BETWEEN STATE AND FEDERAL GOVERNMENT. PLEASE COMMENT ON THE DESIRABILITY AND POTENTIAL PROBLEMS ASSOCIATED WITH THE CREATION OF NRC AGREEMENT COMPACT REGIONS, AS WELL AS THE SUBJECTING OF COMPACT REGIONS GENERALLY TO NRC OVERSIGHT.

ANSWER.

THE NRC STAFF BELIEVES THAT COMPACT COMMISSIONS OR BOARDS SHOULD NOT BE GRANTED ANY HEALTH, SAFETY OR ENVIRONMENTAL REGULATORY AUTHORITY BY VIRTUE OF ENACTMENT OF COMPACT LEGISLATION BY INDIVIDUAL STATES, BY COMPACT CONSENT LANGUAGE ENACTED BY CONGRESS, OR BY AMENDMENTS TO THE LOW-LEVEL RADIOACTIVE WASTE POLICY ACT. FORMAL ESTABLISHMENT OF AGREEMENT COMPACT REGIONS WOULD, IN OUR VIEW, INAPPROPRIATELY REMOVE THE NECESSARY DISTINCTION BETWEEN DEVELOPMENTAL AND REGULATORY RESPONSIBILITIES.

THE ESTABLISHMENT OF A VOLUME LIMITATION CAP, AS POSTULATED IN QUESTION 1, MAY RESULT IN LICENSEE-SPECIFIC ISSUES WHICH REQUIRE CONSIDERATION OF IMPACTS ON HEALTH, SAFETY OR THE ENVIRONMENT. CONSIDERATION OF THESE HEALTH, SAFETY, AND ENVIRONMENTAL ISSUES SHOULD BE HANDLED BY THE NUCLEAR REGULATORY COMMISSION OR THE AGREEMENT STATES UNDER THE CURRENTLY WELL ESTABLISHED REGULATORY FRAMEWORK. WE DO NOT FAVOR THE CREATION OF NEW SCHEMES WHICH WOULD DISRUPT THE ESTABLISHED REGULATORY FRAMEWORK.

WE QUESTION THE APPROPRIATENESS OF ASSIGNING AN INTERSTATE COMPACT COMMISSION RESPONSIBILITY FOR ACTIONS WHICH MAY RESULT IN HEALTH, SAFETY OR ENVIRONMENTAL CONCERNS AT LICENSEE FACILITIES IN MEMBER STATES. PROBLEMS WOULD LIKELY ARISE IF A MEMBER STATE EXERCISED ITS PREROGATIVE TO WITHDRAW FROM THE COMPACT, AS PROVIDED FOR IN THE LANGUAGE OF ALL COMPACTS NOW UNDER CONSIDERATION. WE BELIEVE THE STRONG INTEREST A HOST STATE WILL HAVE IN SITE DEVELOPMENT AND OPERATION MAKE THE ACCEPTABILITY OF ANY COMPACT COMMISSION REGULATORY ACTIONS AFFECTING SUCH ACTIVITIES HIGHLY QUESTIONABLE.

The CHAIRMAN. Our next witness is Hon. Sheldon Meyers, Acting Director, Office of Radiation Programs, Environmental Protection Agency.

Now, Mr. Meyers, come around and have a seat.

Is it agreeable to you if we put your entire statement into the record and let you give us the thrust of it?

Mr. MEYERS. Yes.

The CHAIRMAN. Without objection, that will be done.

STATEMENT OF SHELDON MEYERS, ACTING DIRECTOR, OFFICE OF RADIATION PROGRAMS, ENVIRONMENTAL PROTECTION AGENCY, WASHINGTON, DC

Mr. MEYERS. Mr. Chairman, I appreciate the committee's invitation to appear here today to testify concerning your pending bills dealing with radioactive waste management compacts between the States.

As you know, the Environmental Protection Agency does not have a direct role under the Low-Level Radiation Waste Policy Act of 1980, in either the negotiation, development, or approval of regional interstate compacts under that statute. At EPA, we have, of course, followed the development of the compacts with great interest. We note that the States have made a good deal of progress in several regions. Elsewhere much work remains to be done.

While we support the concept of the interstate compacts generally, we defer to the agencies more directly involved under the statute for specific comments on the pending bills.

EPA has a role but only a limited one in this area. EPA has the authority to establish generally applicable environmental standards to protect public health and the general environment from adverse effects from the land disposal of low-level radioactive wastes. We published an advance notice of proposed rulemaking expressing our intention to do so in August 1983.

In response to a specific request from the States and from the Conference of Radiation Control Program Directors, an organization which represents State radiation health professionals, EPA decided to expand the coverage of the low-level waste standard to include NARM wastes, that is, wastes from naturally occurring and accelerator produced radioactive materials. The States were especially concerned about the treatment of NARM wastes, and what they saw as a significant gap in the rules governing the handling of radioactive wastes. We chose to include NARM wastes within the coverage of our standard in order to close that gap. Our decision means that in the future there will be uniform Federal standards to govern the disposal of NARM wastes. This will eliminate the guesswork, the diversity of standards and broad differences we now find among the States in handling NARM wastes. In some cases it will allow the States to provide needed control where none exists today. In November 1984, the Agency made the formal decision to do the necessary analysis so that NARM wastes could be included within the standard.

We continue to believe that it is important that EPA promulgate a final low-level waste standard, because the final standard will contain several important elements which will make it especially useful. I have mentioned NARM wastes already. The standard will also deal with and define wastes that are "below regulatory concern" [BRC]. When wastes contain very small concentrations of low-level radioactivity, there is no reason from a public health point of view why they cannot be disposed of as we would normal trash. Space in future regional low-level waste disposal facilities will be scarce and expensive. If we can safely exclude certain classes of material as "below regulatory concern," we can save valuable space in the repositories and save everyone involved time and trouble and money.

Our standards are also important for their coverage: in addition to shallow land disposal, the conventional method of disposal, our proposed standard will evaluate the costs and the risks associated with nine other technologies as possible alternatives to shallow land disposal: (1), engineered surface storage; (2), sanitary landfill; (3), improved shallow land disposal; (4), intermediate depth disposal, over 10 meters deep; (5), deep geological disposal in a mined cavity over 100 meters deep; (6), hydrofracturing; (7), deep-well injection; (8), the engineered mount; and finally, (9), disposal by modular concrete cannisters placed in a trench.

We believe that examining these alternatives will be very helpful to some States which are seriously considering the use of methods of disposal other than conventional shallow land disposal.

Mr. Chairman, that concludes my prepared remarks, and I will be pleased to answer any questions the committee may have.

The **Chairman**. Mr. Meyers, you have mentioned that certain wastes are below regulatory concern and may be handled as ordinary trash.

Do you have any estimate as to what percentage of the total low-level waste this may be for purposes of volume reduction?

Mr. **Meyers**. Not at this time, Senator, simply because we have to know which level we are talking about before we can calculate how much of it is available. That is part of an ongoing analysis, so that when we can hone in on a level that we feel will be protective of public health and safety, we will then be able to calculate how much that will exclude from the landfills.

The **Chairman**. As one means of volume reduction, onsite storage by utilities has frequently been mentioned.

From the EPA perspective, does that suggestion raise any significant environmental concerns?

Mr. **Meyers**. Not that I know of, Senator, assuming, of course proper operational practices.

The **Chairman**. I want to thank you for your appearance and you are now excused.

We are going to take a 5-minute recess now. Our next witness is the Governor of South Carolina, who will be here in a few minutes.

[Prepared statement and responses to written questions follow:]

STATEMENT
OF
SHELDON MEYERS
ACTING DIRECTOR
OFFICE OF RADIATION PROGRAMS
U.S. ENVIRONMENTAL PROTECTION AGENCY

Mr. Chairman, My name is Sheldon Meyers and since August 1984 I have been Acting Director of the Office of Radiation Programs in the U.S. Environmental Protection Agency. I appreciate the Committee's invitation to appear today to testify concerning your pending bills dealing with radioactive waste management compacts between the States.

As you know, Mr. Chairman, the Environmental Protection Agency does not have a direct role under the Low Level Radioactive Waste Policy Act of 1980, in either the negotiation, development or approval of regional interstate compacts under that statute. At EPA, we have, of course, followed the development of the compacts with great interest. We note that the States have made a good deal of progress in several regions. Elsewhere, much work remains to be done. While we support the concept of the interstate compacts generally, we defer to the agencies more directly involved under the statute for specific comments on the pending bills.

EPA has a role but only a limited one in this area: EPA has the authority to establish generally applicable environmental standards to protect public health and the general environment from adverse effects from the land disposal of low-level radioactive wastes. We published an Advance Notice of Proposed Rulemaking expressing our intention to do so in August of 1983.

EPA had originally expected to publish a proposed low-level standard early in 1985, with promulgation of our final standard a year later, in 1986. That schedule unfortunately has now been put back by at least a year. There has been one principal cause for this postponement.

In response to a specific request from the States and from the Conference of Radiation Control Program Directors, an organization which represents State radiation health professionals, EPA decided to expand the coverage of the low level waste standard to include NARM wastes, that is wastes from naturally-occurring and accelerator-produced radioactive materials. The States were especially concerned about the treatment of NARM wastes and what they saw as a significant gap in the rules governing the handling of radioactive wastes. We chose to include NARM wastes within the coverage of our standard in order to close that gap. Our decision means that in the future there will be uniform Federal standards to govern the disposal of NARM wastes. This will eliminate the guesswork, the diversity of standards and broad differences we now find among the States in handling NARM wastes. In some cases it will allow the States to provide needed control where none exists today. In November 1984, the Agency made the formal decision to do the necessary analysis so that NARM wastes could be included within the standard.

Last year, in connection with its review of EPA's proposed standard for radionuclides under the Clean Air Act, EPA's Science Advisory Board (SAB) made several suggestions for improving the format, content and presentation of our risk assessments so that future scientific reviews would be more effective and more useful to the Agency. We fully support those changes and have adopted the necessary formats for SAB's review of the low level waste standard which is now in progress.

A special panel of the SAB to examine the risk analysis that is an integral part of the low level waste standard's development was sworn in last month and will begin its deliberations within the next few weeks. We believe that this kind of review will give us a better final product.

We continue to believe that it is important that EPA promulgate a final low level waste standard, because the final standard will contain several important elements which will make it especially useful. I have mentioned NARM waste already. The Standard will also deal with and define wastes that are "below regulatory concern" (BRC). When wastes contain very small concentrations of short-lived radioactivity, there is no reason from a public health point of view why they cannot be disposed of as we would normal trash. Space in future regional low level waste disposal facilities will be scarce and expensive. If we can safely exclude certain classes of material as "below regulatory concern", we can save valuable space in the repositories and save everyone involved time, trouble and money.

Our standards are also important for their coverage: in addition to shallow land disposal, the conventional method of disposal, our proposed standard will evaluate the costs and the risks associated with nine other technologies as possible alternatives to shallow land disposal: 1) engineered surface storage; 2) sanitary landfill; 3) improved shallow land disposal; 4) intermediate depth disposal (over 10 meters deep); 5) deep geological disposal in a mined cavity over 100 meters deep; 6) hydrofracturing; 7) deep-well injection; 8) the engineered mound and finally 9) disposal by modular concrete cannisters placed in a trench.

We believe that examining these alternatives will be very helpful to some States which are seriously considering the use of methods of disposal other than conventional shallow land disposal.

Mr. Chairman, that concludes my prepared remarks and I will be pleased to answer any questions the committee may have.

QUESTIONS FOR SHELDON MEYERS
ENVIRONMENTAL PROTECTION AGENCY

FOR SHELDON MEYERS, EPA (4TH WITNESS):

5. (Q) WHAT IS THE CURRENT STATUS OF YOUR EFFORTS TO COORDINATE YOUR "GENERALLY APPLICABLE ENVIRONMENTAL STANDARD" RULEMAKING AND YOUR CONSIDERATION OF APPLYING RCRA TO LOW-LEVEL WASTE SITES WITH THE NRC'S REGULATORY RESPONSIBILITIES?

(A) WE HAVE HELD PERIODIC MEETINGS WITH THE NUCLEAR REGULATORY COMMISSION'S (NRC) STAFF TO KEEP THEM INFORMED OF OUR PROGRESS ON DEVELOPING GENERALLY APPLICABLE STANDARDS FOR LOW-LEVEL RADIOACTIVE WASTE DISPOSAL. WE ARE PARTICULARLY SENSITIVE TO THE FACT THAT ANY STANDARD WE PROMULGATE MUST BE IMPLEMENTED BY NRC. WE SENT THEM COPIES OF ALL OF OUR TECHNICAL ANALYSIS CONTRACT REPORTS IN JANUARY 1985. ON MARCH 14, 1985 WE PRESENTED A BRIEFING TO NRC STAFF TO ASSIST THEM IN THEIR REVIEW OF OUR CONTRACT REPORTS. WE HAVE ALSO SENT COPIES OF OUR DRAFT LOW-LEVEL WASTE RISK ASSESSMENT, SO THEY CAN CONDUCT A CONCURRENT REVIEW WITH THAT BEING DONE BY THE ENVIRONMENTAL PROTECTION AGENCY'S (EPA) SCIENCE ADVISORY BOARD. AT THIS TIME WE HAVE NOT IDENTIFIED ANY PROBLEM AREAS BETWEEN THE TWO AGENCIES.

WE HAVE BRIEFED NRC STAFF ON OUR INITIAL PLANS TO USE RCRA AUTHORITIES TO PROVIDE CONTROL FOR THE DISPOSAL OF CERTAIN NATURAL AND ACCELERATOR PRODUCED RADIOACTIVE MATERIALS (NARM). THOSE PLANS CALLED FOR THE DISPOSAL OF THESE MATERIALS AT NRC OR NRC AGREEMENT STATE-LICENSED FACILITIES. IT WAS ACKNOWLEDGED THAT THERE WERE SEVERAL AREAS WHERE CLOSE COORDINATION WOULD BE NECESSARY TO MAKE SUCH A SYSTEM WORK. THIS ISSUE HAS BEEN FURTHER COMPLICATED BY NEW PROVISIONS OF THE 1984 RCRA AMENDMENTS WHICH MAY RESTRICT EPA'S FLEXIBILITY IN REGULATING NARM. THIS MATTER IS STILL BEING EVALUATED.

THE OTHER ISSUE REGARDING RCRA AND LOW-LEVEL RADIOACTIVE WASTES IS THE CONCERN FOR HANDLING MIXED HAZARDOUS AND RADIOACTIVE WASTES. THE NRC IS CONDUCTING A STUDY TO DETERMINE WHAT MIXED WASTES ARE BEING GENERATED. FURTHER DISCUSSIONS ARE PENDING THE RESULTS OF THAT STUDY.

6. (Q) YOU NOTE IN YOUR TESTIMONY THAT YOUR SCHEDULE FOR DEVELOPING A "GENERALLY APPLICABLE ENVIRONMENTAL STANDARD" HAS SLIPPED BY "AT LEAST A YEAR." I RECOGNIZE THAT THESE STANDARDS HAVE SOME VALUE: BUT WE REACH A POINT WHERE THE IMPACT ON THE REGULATORY PROGRAM OF FURTHER DELAYS THREATENS THE VERY EFFORT THAT WE ARE ENGAGED IN TODAY IN THIS COMMITTEE. WHEN DO YOU EXPECT TO PROMULGATE A PROPOSED RULE, AND WHEN WILL A FINAL RULE BE ISSUED?

(A) WE HAVE CAREFULLY EVALUATED THE POSSIBILITY THAT EPA'S TARDINESS IN SETTING A "GENERALLY APPLICABLE STANDARD" MIGHT DISTURB THE PROGRESS OF THE NATIONAL LOW-LEVEL RADIOACTIVE WASTE DISPOSAL PROGRAM. CONSIDERING THE STATUS OF COMPACTING AND DISPOSAL SITE SELECTION WE DO NOT BELIEVE THIS IS A REAL PROBLEM. FURTHERMORE, WE MUST CONSIDER THAT IN MOST OF ITS PROGRAMS, EPA FINDS ITSELF IN THE POSITION OF SETTING STANDARDS FOR ACTIVITIES WHICH ARE TO SOME EXTENT ONGOING AT PRESENT. WE PLAN TO PROPOSE OUR GENERALLY APPLICABLE STANDARD IN FISCAL YEAR 1986 AND PUBLISH FINAL RULES IN FISCAL YEAR 1987.

7. (Q) YOU HAVE MENTIONED THAT CERTAIN WASTES ARE BELOW REGULATORY CONCERN (BRC), AND MAY BE HANDLED AS ORDINARY TRASH. DO YOU HAVE ANY ESTIMATE AS TO WHAT PERCENTAGE OF TOTAL LOW-LEVEL WASTE THIS MAY BE, FOR PURPOSES OF VOLUME REDUCTION?

(A) THE VOLUME OF WASTE THAT MAY FALL IN THE CATEGORY OF BELOW REGULATORY CONCERN (BRC) WILL DEPEND ON THE TECHNICAL CRITERIA ESTABLISHED FOR BRC. WE ARE JUST COMPLETING OUR BASIC RISK ASSESSMENT AND HAVE NOT DECIDED ON THE DETAILS OF THE BRC CRITERIA. THE ACTUAL AMOUNT OF WASTE TO BE DEREGULATED WILL ALSO DEPEND ON HOW THE CRITERIA ARE IMPLEMENTED BY THE NRC AND THEIR AGREEMENT STATES. ONE OF OUR WORKING DECISION CRITERIA IS THAT A BRC MUST BE SHOWN TO PROVIDE SOME CONCRETE BENEFITS IN TERMS OF LOW-LEVEL WASTE REDUCTION AT MINIMAL INCREASED RISK. THE PRELIMINARY ANALYSIS SHOWS THIS TO BE A REAL POSSIBILITY.

8 (Q) AS ONE MEANS OF VOLUME REDUCTION, ON-SITE STORAGE BY UTILITIES HAS FREQUENTLY BEEN MENTIONED. FROM THE EPA PERSPECTIVE, DOES THIS SUGGESTION RAISE ANY SIGNIFICANT ENVIRONMENTAL CONCERNS?

(A) THE PRIMARY POSSIBLE ENVIRONMENTAL CONCERN WOULD BE ANY INCREASE IN THE PROBABILITY OR CONSEQUENCES OF INCIDENTS SUCH AS FIRES, ETC. THE EVALUATION OF SUCH POSSIBILITIES IS PROPERLY IN THE PURVIEW OF THE NRC.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

SEP 4 1985

OFFICE OF
EXTERNAL AFFAIRS

Honorable Strom Thurmond
Chairman
Committee on the Judiciary
United States Senate
Washington, D. C. 20510

Dear Mr. Chairman:

This is in response to your July 9, 1985 letter to Mr. Sheldon Meyers, Acting Director, Office of Radiation Programs, in which you requested his response to questions from Senator Simpson following up on Mr. Meyers' March 8, 1985 testimony before the Committee concerning low-level radioactive waste management.

Mr. Meyers' responses are enclosed. If I can be of further assistance, please let me know.

Sincerely,

Richard E. Sanderson
Acting Assistant Administrator
for External Affairs

Enclosure

Responses from Sheldon Meyers to Committee on the Judiciary

Question 5

What is the current status of your efforts to coordinate your "Generally Applicable Environmental Standard" Rulemaking and your consideration of applying RCRA to low-level waste sites with the NRC's regulatory responsibilities?

Answer

The staffs of EPA and NRC continue to have periodic information exchange meetings on our low-level waste activities. The most recent activities have involved discussions of risk assessment for carbon-14, which also involved DOE and USGS; revision of source terms; and consideration of alternative disposal methods. NRC has been furnished copies of the EPA draft low-level waste risk assessment to review simultaneously with the EPA Science Advisory Board. One briefing meeting has been held pertaining to this review.

Two areas that will require future discussion between the two agencies are 1) the EPA promulgation of the criteria for wastes that are Below Regulatory Concern and the NRC implementation of such criteria, and 2) the Administrative Options for handling natural and accelerator produced radioactive material, which are RCRA wastes, at NRC licensed sites. The agencies are also continuing discussions on "mixed wastes" and the application of RCRA to the hazardous components. The NRC has just briefed EPA on a study identifying the wastes that fall in this area. I understand that the RCRA program is currently preparing further responses on this matter as part of the Agency's response to questions on HR1083.

Question 6

You note in your testimony that your schedule for developing a "Generally Applicable Environmental Standard" has slipped by "At least a year." I recognize that these standards have some value; but we reach a point where the impact on the regulatory program of further delays threatens the very effort that we are engaged in today in this committee. When do you expect to promulgate a proposed rule, and when will a final rule be issued.

Answer:

Our schedule calls for proposal of a standard in the Spring of 1986 with final promulgation a year later.

We too feel it is important to complete the low-level radioactive waste standards effort. On the other hand, we are not aware of any area where this issue is impeding efforts under the Low-Level Radioactive Waste Policy Act. We believe it is very important for us to have significant interchanges with other parties such as NRC (as discussed in the previous response), DOE, the States, USGS and public forums. This insures that areas of particular concern are addressed and coordinated to avoid regulatory overlap and duplication. Such activities should not only assure an improved standard but also help mitigate controversy over low-level waste issues in general. We would also note that a major portion of the delay is due to our efforts to include natural and accelerator produced radioactive wastes in the standards, which was recommended by many States as a high priority need, even though they understood that slippage would occur.

[Short recess.]

The **CHAIRMAN**. The committee will come to order.

We are very pleased to have the distinguished and able Governor of South Carolina with us, Richard W. Riley, and we will be pleased to hear from him at this time.

STATEMENT OF HON. RICHARD W. RILEY, GOVERNOR, STATE OF SOUTH CAROLINA

Governor **RILEY**. Thank you very much, Mr. Chairman. We appreciate this opportunity to testify before you and the committee today.

Having appeared before the same committee in the past to address the same subject matter, I do not think there is any need to discuss the background of my testimony. And certainly being a South Carolinian, you are well familiar with this issue and the background of it.

I would like to then go right to the issue that is before us. The question then is, Will we as a nation, as a Congress, and as the several States, proceed to implement the 1980 Low-Level Radioactive Waste Policy Act. For us in South Carolina, implementing the 1980 act means one thing: Consent to the Southeast compact.

The time has come to stop worrying about the what ifs should consent legislation not be enacted by Congress. The time has come to avoid recreating the crisis environment of a half decade ago. The time has come, sir, to focus our attention and energies on passing this consent legislation.

With that as our goal, we can leave the lawsuits, the fees to the legal scholars and the theorists, for the only way that we can have a legal confrontation is to fail in our first priority. So I urge you, Mr. Chairman, and the members of your committee to please let us not fail.

Currently before the members of the committee is the Southeast compact, S. 44, introduced by the chairman along with low-level waste compacts for the northeast and Rocky Mountain regions. I support Senate bill, S. 44, as well as the other two compact bills before the committee. I join my senior Senator and your chairman in the belief that passage of these compacts by your committee would be the most positive sign to the citizens of my State and also the citizens of Washington and Nevada that Congress and the other States are seriously committed to implement the 1980 act.

Passage of these compacts by the full Congress will, of course, require the resolution of a number of issues. As we all know, Congressman Udall, chairman of the Committee on Interior and Insular Affairs of the U.S. House of Representatives, has offered a proposal, H.R. 1083, as a means of addressing these issues.

Earlier this morning, I testified before Mr. Udall's committee in response to his proposal.

I would like to summarize this testimony, testimony which I am pleased to say has the full support of Senator Thurmond and every member of the South Carolina congressional delegation.

There are three specific issues which must be addressed to ensure that congressional action leads toward our ultimate goal and that goal, of course, is the development of new low-level waste disposal facilities in my region, the Southeast, and in other regions of the Nation.

First, I want to underscore the importance of the limitation or the cap which H.R. 1083 places on out-of-region access to the existing disposal sites. Let me be clear on this point. There cannot be anything like business as usual after January 1, 1986. That would simply not be acceptable to the host States and it would only serve to undercut the goal of creating new sites.

To be effective, this national cap must be tough but it must be doable.

Second, a congressional framework should provide flexibility to the three host States to allocate this national cap among themselves. This authority is provided in each of the compacts, and these decisions will best be made by the States affected.

Third, the 3-year transition period in H.R. 1083 is too long. The only real result from such a lengthy extension of access will be to undercut efforts to site new facilities and to encourage the belief that once again the problem has been postponed until some indefinite time in the future. The transition period should end at the time when the new disposal and storage facilities are projected to come into operation which will be in the late 1980's.

Further, the national cap should decline and the surcharges on out-of-region wastes should increase each year during the transition period.

There must be an annual reminder that we are transitioning to something other than an early 1990's version of the same problem which brings us here today.

These are the three main points which I think must be addressed to provide an acceptable framework. There are a number of other issues which I addressed in my testimony to the House committee. To the extent that these suggestions will help you, I urge this committee to consider incorporating them into your consent legislation, and to that end I would like to submit a complete copy of my House testimony into the record.

The CHAIRMAN. Without objection, that will be done following your remarks this morning.

Mr. RILEY. Good. Thank you, sir.

Mr. Chairman, let me conclude my remarks by reiterating my request for quick action by the committee on the consent legislation. The deadlock which has prevented congressional consent to the compacts has resulted from the fear that some States would lose access to the three existing sites. Failure to resolve this matter in a reasonable way, however, will undoubtedly lead to the very same outcome that these States fear. Future access to our disposal site in South Carolina will only be made available under the compact.

We have a nuclear industry in the State which brings us many benefits and many advantages, and with this comes a certain burden, and that burden, of course, is waste. South Carolina has consistently demonstrated its commitment to do its share to solve the waste disposal problem.

I call upon this committee and the other Members of the Congress to join us in this commitment by passing the enabling legislation for the compacts.

Again, sir, I thank you so much for the opportunity to testify, and I would be happy to respond to questions.

I would, Senator, like to submit at the request of Gov. Richard Bryan of Nevada, his letter, which I think staff has, where he in substance endorses the position which I have expressed and the testimony which subsequently will be received in this panel from Governor Gardner of Washington State.

The CHAIRMAN. Without objection, your request to have Governor Bryan's letter inserted in the record of these hearings is approved.

[Prepared statement of Gov. Richard W. Riley and letter of Gov. Richard W. Bryan follow:]

Testimony of

Richard W. Riley

Governor of South Carolina

Before the Committee on Interior and Insular Affairs
Subcommittee on Energy and the Environment
United States House of Representatives

March 8, 1985

Mr. Chairman and members of the committee, I want to thank you for this opportunity to testify today. Having appeared before this same committee in the past, to address this same subject, I do not think there is any need to discuss the background to my testimony.

I would like to go right to the issue before us: Will we, as a nation -- as the Congress and the several states -- proceed to implement the 1980 Low Level Waste Policy Act?

For us -- in South Carolina -- implementing the 1980 Act means one thing: consent for the Southeast Compact.

The time has come to stop worrying about the "what if's" should consent legislation not be enacted by Congress. The time has come to avoid recreating the crisis environment of a half a decade ago. The time has come to focus our attention and our energies on passing this consent legislation.

With that as our goal, we can leave the law suits to the legal scholars and the theorists. For the only way we can have a legal confrontation is to fail in our first priority.

So let's don't fail.

Mr. Chairman, the deadlock -- which has prevented Congressional consent to the compacts -- has resulted from the fear that some states would lose access to the three existing sites. Failure to resolve this matter in a reasonable way, however, will undoubtedly lead to the very outcome these states fear. Future access to our disposal site will only be made available under the compact.

I believe the proposal which has been offered by the Chairman is the vehicle which can lead to consent for the compacts. It will take hard work and good faith on the part of everyone to perfect this proposal. But it can be done.

I would like to address three specific areas of H.R. 1083 which will require special attention to insure that Congressional action leads toward our ultimate goal -- the development of new low level waste disposal facilities in my region and around the nation.

First, I want to underscore the importance of the limitation which H.R. 1083 places on out-of-region access to the existing disposal sites. Let me be clear on this point: There can not be anything like business as usual after January 1, 1986. That would not be acceptable to the host states, and it would only serve to undercut the goal of creating new sites.

To be effective, this limitation must be tough, but doable. I think H.R. 1083 is a good starting point. I will work with the committee and the generator community to determine a strict but fair national cap.

Second, I would propose that the language of Section 5(b) be modified to provide the flexibility to the three host states to allocate this national cap among themselves. This authority is provided in each of the compacts, and these decisions will be best made by the states affected.

Third, the seven year "transition" period is too long. The only real result from such a lengthy extension of access will be to undercut efforts to site new facilities and to encourage the belief that, once again, the problem has been postponed until some indefinite time in the future.

The "transition" period should end at the time when new disposal or storage facilities are projected to come into operation which would be in the late 1980's. Further, the national cap should decline and the surcharges on out-of-region waste should increase each year during this period. There must be an annual reminder that we are transitioning to something other than an early 1990's version of the same problem which brings us here today.

These are the three main points which must be addressed to provide an acceptable framework.

There are, of course, a number of other issues which will require resolution; for example:

-- The surcharge in Section 5(c)(1) should be allowed to graduate upward for Class B and Class C wastes, and the surcharge limit in Section 5(c)(2) should be eliminated.

-- H.R. 1083 should make explicit that the framework contained in this legislation will not take effect without consent to the compacts and with the ten year review cycle the Chairman has proposed.

-- Congress should call for modifications of the licensing process to facilitate the siting process.

-- There is a need for further modification of the language in Sections 2, 3, and 4 dealing with technical issues such as definitions of waste categories.

We are prepared to work with the committee to resolve these various matters.

Mr. Chairman, may I use this opportunity to remind the committee and my fellow governors, who I will be calling upon to join in this effort, that South Carolina's health and safety concerns are the same as those in other states. Any argument that can be made to prevent the opening of a site can be made just as strongly in support of closing one.

We have a nuclear industry in this nation which brings us many benefits and advantages. With this comes waste. South Carolina has consistently demonstrated its commitment to do its share to solve the waste disposal problem.

I call upon this committee and the other members of Congress to join us in this commitment by passing the enabling legislation for the compacts.

Again, thank you for the opportunity to testify. I would be happy to answer any questions you might have.

THE STATE OF NEVADA
EXECUTIVE CHAMBER
Carson City, Nevada 89710

RICHARD H. BRYAN
Governor

TELEPHONE
(702) 885-5670

March 7, 1985

The Honorable Strom Thurmond
Chairman, Senate Committee on Judiciary
Washington, D.C. 20510

Dear Senator Thurmond:

I am pleased to offer my comments in addition to the testimony provided by my colleague, Governor Richard Riley of South Carolina.

It is clearly time to take definitive action toward resolution of the current impasse prohibiting the rapid and necessary development of low level radioactive waste disposal facilities. Toward that end, Nevada supports prompt Congressional consent to all existing low level radioactive waste compacts. Failure to provide timely consent will effectively cripple the current regional approach to waste management and provide a forum for a new series of unproductive confrontations and crises over waste disposal.

In addition, Nevada recognizes and appreciates the efforts of Congressman Udall to facilitate additional waste disposal site development through amendments to the Low-Level Radioactive Waste Policy Act. It is my considered opinion that Mr. Udall's proposed amendments represent a good vehicle for structuring an acceptable solution to a number of waste management problems.

I also express my support for a national ceiling on the amount of out-of-region waste to be accepted for disposal at the three existing sites. That ceiling should require major reductions in waste shipped out-of-region, and a graduated system of surcharges on such shipments.

Finally, I call attention to the fact that five (5) years have passed since enactment of the Low Level Radioactive Waste Policy Act, without a single new disposal site being placed in operation. Congress must move decisively now to require prompt site development action on the part of non-sited states or regions.

Thank you for your considerable efforts and attention to this matter.

Sincerely,

RICHARD H. BRYAN
Governor

RHB/cjc

The **Chairman**. I understand, too, that the Governor of Washington State has a representative here?

Is that correct?

Mr. **Eschels**. Yes, I am, sir.

The **Chairman**. Did you want to make a statement at this time? You may proceed and then I want to ask a few questions.

STATEMENT OF CURTIS ESCHELS, SPECIAL ASSISTANT TO THE GOVERNOR, STATE OF WASHINGTON

Mr. **Eschels**. Thank you, Mr. Chairman, and members of the committee for the opportunity to testify on the Northwest compact legislation and the compacts for the other regions.

The Chairman, Senator Laxalt, and we in Washington State share the distinction of hosting the only presently operating commercial low-level waste sites.

Washington State, along with the other States, has remained reasonable and patient while it waited Congress' ratification of various compacts. We support the intent of the Low-Level Radioactive Policy Act of 1980 and believe interstate compacts are appropriate vehicles to achieve the aim of that act. We believe it is also time for our patience to be rewarded.

The State of Washington remains committed to a reduction in the volume of waste it now receives. To that end, we will encourage all reasonable and responsible approaches toward ratification of presently submitted compacts.

We also believe Congress should include very strong incentives for noncompact States to act in a reasonable manner to join in a solution to a national problem. Presently we receive over 50 percent of the Nation's low-level waste, even though region generates only 7 percent of the waste. Within Washington State we generate only 3 percent of the Nation's waste. Today, the chair of the Northwest Compact Commission testified in the House on certain amendments to the 1980 act which provide incentives for noncompact States. Ratification of the compact is a key ingredient to a solution.

We recognize and appreciate the efforts of Senator Thurmond, Governor Riley, and many others toward progress in implementing the 1980 act. We pledge to continue working with them and others to overcome the remaining hurdles. Everybody, must understand, however, that if those efforts are unsuccessful, Washington State is resolved to protect the interests of our citizens.

Congress' consent to the compacts before it will help accomplish our principal goal—a steady reduction in volume coming to Washington State, achieved in an orderly, reasonable and firm manner.

Thank you.

The **Chairman**. I want to thank you for appearing on behalf of your distinguished Governor, Mr. Eschels, and we appreciate your presence and your testimony.

Governor **Riley**. Mr. Chairman, also as part of our panel representing the three host areas is Dr. Richard S. Hodes, chairman of our southeast compact, and if he could make a brief statement, sir——

The **Chairman**. We will be very pleased to have Dr. Richard S. Hodes, chairman of the Southeast Interstate Low-Level Radioactive Waste Management Commission, to testify at this time.

STATEMENT OF RICHARD S. HODES, M.D., CHAIRMAN, SOUTHEAST INTERSTATE LOW-LEVEL RADIOACTIVE WASTE MANAGEMENT COMMISSION, RALEIGH, NC

Dr. **Hodes**. Thank you, Mr. Chairman.

Basically, Mr. Chairman, as a representative and as chairman of the Southeast Interstate Low-Level Radioactive Waste Management Commission, I am pleased to have the opportunity to appear this morning with Governor Riley to testify on the low-level waste compact legislation pending before this committee.

On behalf of the compact commission, I want to express full support. The commission has met as late as last week and, by unanimous vote, grants full support to Governor Riley and the testimony that he had offered you this morning.

For over 4 years now, the eight States in the southeast region have worked together to establish a regional system for the management and disposal of our low-level wastes. Let me assure you, sir, this has not been an easy task. But the fact that we accomplished so much should stand as evidence to this committee and to the entire Congress that with leadership and resolve the States can and will resume their responsibility. We are proud of what we have accomplished thus far. But again, just like South Carolina, we are all frustrated by the uncertainty which shadows our efforts as a result of the failure to gain congressional consent of our compacts.

The commission is pleased with the initiative taken by the chairman to gain consent of the compacts by the committee.

Time, as we are all aware, is an important factor to the resolution of this issue. So I urge thiscommittee to seize the opportunity which Governor Riley, Governor Bryan, Governor Gardner, and the State of Washington have afforded us in their testimony. We can no longer measure our progress in months and years. We urge a quick answer by this committee so that the legislative process can go forward. Without timely consent to these compacts, our Nation's ability to maintain our regional efforts will be seriously jeopardized.

Again, thank you, sir, for this opportunity to testify. I will be happy to answer any questions, sir.

The **Chairman**. Thank you very much.

I have a few questions here, Governor, I would like to propound. Before I do that, I would like to acknowledge the presence of Mrs. Richard W. Riley, the charming wife of the Governor of South Carolina. We are very pleased to have her with us.

Governor Riley, I first want to congratulate you on the leadership you have provided both in helping to formulate the 1980 Low-Level Radioactive Waste Policy Act and in the interstate compact system. I look forward to working with you in an effort to truly regionalize the system for low-level waste disposal and to end South Carolina's role as a national dumping site. I can assure you that as chairman of this committee and as President pro tempore of the Senate, I have no greater priority in this session of Congress than to seek a fair and equitable solution to this problem, and I want to say to the public generally as South Carolina has been receiving from 45 to 48 percent of this low-level waste, it is unfair that three States are now taking all this low-level waste for the whole Nation. And we are determined in South Carolina that we are not going to continue to take all this waste.

We want to be reasonable. We want to be fair. But it is certainly unjust to expect South Carolina, Washington State, and Nevada to keep taking all this waste. We are putting the different States on notice that action must be taken to remedy this situation.

The 1980 Policy Act, which we passed, provided that by January 1, 1986, the regional compacts would be entered into.

Now, I am very pleased that the Rocky Mountain States, composed of Wyoming, Colorado, Nevada, and New Mexico, have entered into a compact. That compact is now before this committee and we want it acted on and acted on favorably.

I am very pleased that the northwest compact, including Alaska, Washington State, Oregon, Montana, Idaho, Utah, and Hawaii, have entered into a compact. We want that compact acted on. People in those States want that compact acted on.

So we have got three compacts before us now. We will have others that are being worked on very diligently and will soon be before us. There is just no excuse in this Congress to not carry out the 1980 Policy Act, and we want it clear that we expect the Congress to act favorably on these compacts in accordance with that act.

Now, Governor Riley, I have a few questions here I would like to propound to you if you would be kind enough to answer them.

Governor RILEY. All right, sir.

The CHAIRMAN. Governor, if Congress refuses to grant consent to the compacts after January 1, 1986, what course of action do you intend to pursue?

Governor RILEY. Mr. Chairman, first of all, I want to thank you for your statement and say that I endorse it fully, and appreciate the fact that you are taking a strong position on it, and certainly hope that we are successful, as you indicate, and I thank you for that statement.

I think I might best respond to your question by repeating what I said in my state of the State address recently in South Carolina dealing with this issue.

As you know, it is a very sensitive issue in our State, and I have to be very careful about what I say to make sure it is accurate and responsible, and certainly we all have a responsibility of leadership to see that we get some results.

I said in my state of the State address the following: "But it is now the responsibility of Congress to approve this compact. We will participate, I said, in any sincere and responsible effort to ratify regional compacts. However, if the Congress fails to act by January 1, 1986, we will take whatever action is necessary to close the site completely or halt unrestricted access to South Carolina as a nuclear dumping ground." That was my statement then. It was carefully thought out. And it is my statement to you, sir, today.

The CHAIRMAN. Now, the southeast compact, which your and my State has entered into, is composed of the following States: Virginia, North Carolina, South Carolina, Tennessee, Georgia, Florida, Alabama, and Mississippi, and those eight States now have entered into this southeast compact.

The compact is now before this committee, and there is no reason why the committee and the Senate should not go forward in accordance with the law. If we are going to follow the law, if we believe in the law, we will follow it and enact these compacts. The 1980 law provides that, and if anybody is going to set an example for the people of this country to follow the law, it seems to me the Congress ought to do it. The Congress passes a law and they ought to follow a law they passed.

Now, closing the site would likely result in a court challenge. What other measures would you consider to protect the interests of South Carolina if a court ordered it to remain open?

Governor RILEY. Mr. Chairman, of course, I think it would probably be ill advised for me to deal with a series of contingencies. My position, of course, is that I will take every means to see that it is either closed or that access from other States is limited, that is, to keep it open for South Carolina waste only.

I think it would be probably unwise for me to give other options I might have. I simply say that we want to work with the Congress, House and Senate, every way that we can to try to work this issue of a transition period out. If that does not work out, then I, as Governor of the State, feeling as you do that enough is enough, that the Congress has passed this act in 1980 and told us what to do, and we have done it.

The eight States in our region, all of them have gone to their legislatures and passed compacts. We then had to go back to our legislatures and get all of our compacts consistent with each other. We have gone to our legislature two or three times. We have got all that in place and we simply are waiting on this consent.

Now, again, I do not want to come before you and before the Congress making an idle threat or a hollow threat, but we are to the road's end, and I simply want to assure your committee, just as you have indicated, that South Carolina, if nothing is done in 1986 to resolve this issue, that we see as being totally completed, we are going to do what it takes to respond, to either close the site or limit it to South Carolina waste.

The CHAIRMAN. Under these compacts, I believe each State will have a facility for a period of time. Then another State will take the low-level waste for a period of time and alternate until all the States have borne their share.

Under the southeast compact, you have eight States. Is that your understanding of it?

Governor RILEY. Yes; and I might ask Dr. Hodes to speak to the progress we made in our southeast compact looking to that process. Doctor.

Dr. HODES. Thank you, Governor.

Mr. Chairman, the process of establishing and identifying host States or States after 1982 has already been initiated by the compact commission and, in fact, we have contracted already to determine what the criteria for identifying a host State shall be. That contract is going forward, and as those criteria are developed under contract, public hearings will be held on those criteria.

I am not going to be able to state to you categorically that we will just rotate State to State. It may be reasonable to identify more than one State in the region. It is not the intent of the compact commission to identify a site within a State, rather, but simply to identify the host State and then, in cooperation with the host State, assist them on site identification. But it is generally assumed, I would say, that we would follow the pattern which you suggest, and that is a State-by-State rotation. But this will be done very carefully after establishing criteria, establishing public hearings on the criteria, and then carefully proceeding while applying those criteria to identifying a singular host State.

Some of those criteria are beginning to emerge, and if members of the staff would be interested in how we are progressing with that, we would be happy to supply that information.

The CHAIRMAN. Governor Riley, earlier today I believe you proposed a national cap on out-of-region waste.

What do you think that cap should be for the Barnwell site?

Governor RILEY. Mr. Chairman, the Barnwell site now receives about 1.2 million cubic feet per year, and we are talking about a transition period which I would hope would certainly not be longer than 3 years. During this 3-year period, I would certainly be looking at an amount of low-level nuclear waste not to exceed 1.2 million, just what we take now. I think that is a reasonable position. I I would hope that during the transition period we could take less than that, and I would support taking less than that, but I perceive the level of the wastes that we take now as being a ceiling and we would urge that in establishing the cap, we take less than we take now but certainly, under no circumstances, more.

The CHAIRMAN. Governor Riley, I believe you said that modifications should be made in the licensing process for new disposal sites.

What kind of changes would you recommend?

Dr. Hodes, feel free to come in on any question I ask.

Governor RILEY. Mr. Chairman, my comment would simply be that as far as the Senate, this committee's action on the measure would simply be to instruct the Nuclear Regulatory Commission or the agreement States to arrive at license changes in their regulations to accomplish the goals that you instruct them to accomplish. I think that is what I would recommend

Dr. HODES. Mr. Chairman, the commission itself would recommend the Nuclear Regulatory Commission carefully examine varying disposal techniques. Currently at Barnwell, as you are aware, we have used the shallow land system. We are not necessarily committed to shallow land disposal as the only means of low-level waste disposal. Therefore, the commission in its action in licensing should examine any safe disposal method that evolves from our deliberations.

We are at the moment establishing criteria for host State selection, after this we probably will move on to methodology. There are numerous methodologies available and new ones emerging on a reasonably regular basis. As the technology changes, licensing criteria should change consistently. We would hope the committee would feel comfortable that the commission would stay abreast of current technology and allow licensing changes as technology improves.

The CHAIRMAN. If the special assistant to the Governor of the State of Washington cares to respond to any of these questions, feel free to express yourself.

Mr. ESCHELS. Thank you.

The CHAIRMAN. One proposal being discussed recently called for utilities to temporarily store low-level waste on site until more reasonable waste disposal facilities are established. Governor, how do you feel about such temporary on-site storage?

Mr. RILEY. Well, Mr. Chairman, I think that is another alternative that certainly bears review, and to the extent that storage would be required I would submit that simply it should be done in the most practical way consistent with health and safety. Most of the utilities, if not all of them, I think have the capabilities to do this and, as Dr. Hodes says, there are a number of technologies that are being developed day by day that make this option appealing.

I do think that utilities generally have the capacity to handle storage and certainly consistent with health and safety, that should be part of the package.

The CHAIRMAN. Governor, would you prefer this committee to move ahead with trying to report S. 44 to the full Senate as it is now drafted and pursue changes on the floor of the Senate or pursue negotiations now along the lines you have outlined in your counter proposal to the Udall plan?

Mr. RILEY. Mr. Chairman, I respectfully submit, sir, that time is of the essence. The issue is very clear. I would much prefer a course of action which would approve the compacts as they are, similar, exactly as you have presented it in the bill that you have introduced. At some point in time I recognize from a very practical standpoint that if you and your colleagues and your colleagues in the House feel that it is not feasible to pass the compacts as is without a transition period, then certainly we at that point would be willing to discuss a reasonable transition period with full consent being part of any discussion regarding transition.

Mr. ESCHELS. I would join the Governor in that statement. We believe in Washington that the provisions of the Udall bill must go as a package with ratification of the compacts.

The CHAIRMAN. Is there any other statement that any of you witnesses would care to make at this time before we excuse you?

Dr. HODES. Mr. Chairman, if I may.

The CHAIRMAN. Go ahead, doctor.

Dr. HODES. I just wanted to call attention to an editorial that appeared in the New York Times last spring, last April, in which the editorial carefully pointed out that without logical and reasonable approaches to proceeding with the consent to these compacts that we could be faced in this Nation a situation with each State developing very costly disposal sites of their own, with the effect that rate-payers in the States around the country would pay a very high price for the failure of Congress and us in the compact regions to successfully resolve the whole problem of low-level waste disposal. That editorial was quite strong and very pointed, and I would commend to the reading of those interested the editorial itself.

I am not sure of the precise date, but it was in April of 1984.

Mr. Riley. Mr. Chairman, again, I thank you so much for permitting us to testify and for your interest in having these hearings and proceeding with the compact consent legislation.

I would ask if I could submit for the record the policy positions 1984–85 of the National Governors Association wherein the Governors of this Nation passed a clear support of congressional consent of compacts that under the 1980 Act are being submitted to the Congress, and I ask that this National Governors Association policy position be made part of the record.

The Chairman. Without objection, that will be done.

[Information follows:]

NUCLEAR ENERGY POLICY

LOW LEVEL RADIOACTIVE WASTE MANAGEMENT

8. Transition Period

The National Governors' Association remains committed to the full implementation of the basic concepts of the Low Level Radioactive Waste Policy Act of 1980. To achieve the goals of the act, the Governors recognize that a transition period to allow for the expeditious development of new State or regional low level waste disposal facilities is necessary. Conditions governing the transition period should embody a distribution of incentives and responsibilities between States and regions with operating sites and those which currently lack such sites. These conditions should also be consistent with full protection of public health and safety.

Specifically, legislation dealing with the transition period should include:

An established period of time after January 1, 1986 during which regions and States without sites would be allowed continued access to currently operating sites subject to several conditions and limitations. The extension should permit the achievable but expeditious construction of new disposal facilities. A firm date after which out-of-region access to existing sites ends should be included in Federal legislation.

Restrictions on the amount of low level waste which unsited regions or States could continue to dispose of at operating sites. These reductions, derived from a base period or base amount, should be of sufficient magnitude to provide incentives to non-sited regions to bring new capacity on line, consistent with the full protection of public health and safety.

Authorization for the sited States to impose surcharges on out-of-region waste. These surcharges should be established by Congress to provide an incentive for sited regions to remain accessible during the transition period. They might also be scaled up in the latter years of the transition period to act as a fiscal inducement for unsited regions or States to bring new capacity on line before the end of the transition period. Increased surcharges might also be imposed if unsited States and regions failed to attain intermediate milestones.

Specific, practical and flexible means of meeting the volume restrictions which apply to the disposal of out-of-region wastes.

Authorization allowing the Department of Energy to continue to provide adequate assistance, on a par with recent funding levels, to States during the transition period.

The establishment of identifiable milestones with designated penalties for failure to attain the deadlines.

Finally, the Governors recognize that agreement on all the provisions of the transition period will require additional discussions among regions and States. Governors encourage the National Governors' Association's staff to continue to facilitate low level waste negotiations aimed at achieving NGA policy and ratification of the compacts.

The Chairman. As I understand, is this a resolution the Governors have passed?

Mr. Riley. Yes, sir. It is a policy position on low-level radioactive waste disposal.

The Chairman. A policy position on low-level radioactive waste, and they endorse these compacts?

Mr. **Riley**. Absolutely and the whole procedure and, Mr. Chairman, again, as a Governor I am very pleased and proud that so much activity is taking place from State to State around the country. Enough has not taken place obviously; but if these compacts will be consented to, all of the indications to me are very good that many States, some of the largest States have passed legislation calling for the development of a site. Thirty-six States are in compacts of one kind or another and as you indicate those will be coming here soon, I am sure, in addition to the 3 you already have.

So I think the States are moving. I think the policy was resolved in 1980. We are trying to comply with that, and I again would join with your strong statement and ask mine to accompany that, urging your colleagues to resolve this national issue as it is set up in the 1980 act.

The **Chairman**. I have made several speeches on the floor of the Senate on this question and I shall continue to exert every effort possible to get these compacts approved by the Senate.

Now, I have a statement here by the distinguished Senator from Iowa, Senator Grassley, very brief and I will read it:

> This is certainly a serious problem and we need to get these compacts ratified as quickly as possible. I plan to introduce the Midwest low-level radioactive waste compact next week. Currently we are soliciting cosponsors for this bill and we should have those lined up shortly.
>
> Mr. Chairman, I know you are anxious to proceed with these and I will assist you in that effort to the best of my ability.
>
> That is all I have, Mr. Chairman.

So I want to congratulate Senator Grassley for taking the initiative in that region.

Now, Mr. Eschels, as you know there is legislation pending in South Carolina which would close the Barnwell site. Should that site be closed on January 1, 1986, would the Hanford site be available to receive the volume now sent to Barnwell?

Mr. **Eschels**. Mr. Chairman, there may be a few people who would look to Washington to pick up the difference if that were to occur. I would like to disabuse them of the notion that is possible. We are not willing to pick up the difference.

The **Chairman**. You are not willing to pick it up?

Mr. **Eschels**. That is correct.

The **Chairman**. Where in the world is it going? If they close their site and you are not willing to pick it up, I doubt if Nevada is going to be willing to take it.

Mr. **Riley**. Mr. Chairman, I think I can safely speak for Governor Bryan of Nevada, that they absolutely would join the same position that Washington and South Carolina has.

The **Chairman**. Now, Mr. Eschels, does your State legislature have before it any proposals that would close or limit access to Hanford?

Mr. **Eschels**. Yes, Mr. Chairman. In addition to Governor Gardner's interest there are strong interests within the State legislature. There are bills pending to raise the fees on radioactive waste disposal, another fee on the transportation of radioactive waste, another raising the rate which the disposers pay into the perpetual care and maintenance fund, another to reduce the volume from a State statutory standpoint unless the compact is ratified and another bill which would require third-party inspection at the site of generation.

All those bills are pending. There are supposed to be votes taken today within the respective committees. I believe that my reference in the prepared testimony to achieving the aims of the 1980 act in an orderly, reasonable and firm manner is preferable to the kinds of actions which we will be forced to take if there is not ratification this year.

The **Chairman**. The only sensible answer is to follow the law, the 1980 law that was passed, and every State is challenged to do that. There is no reason why every State should not follow the Federal law.

Now, this is a very important matter and these three States are determined they are not going to continue to take this waste any longer, so I hope that the States that have not entered into compacts will do it promptly and get those compacts before committee so we can act upon them. There are several more compacts being worked on, but every region ought to be working on a compact and in that way we can handle this matter as fair and just and reasonable to the entire Nation.

Governor, we are very pleased to have you with us and, Dr. Hodes, we are very pleased to have you and we are very pleased to have Mr. Eschels. We thank all of you for your fine testimony.

Mr. **Riley**. Thank you so much, Senator.

The **Chairman**. We will take a recess for a few minutes.

[Recess.]

The **Chairman**. The committee will come to order.

I have just been advised that yesterday Senator Robert Dole, the Senate majority leader, introduced the central interstate low-level radioactive waste compact bill. His bill S. 655 provides for congressional consent to the central interstate compact which has been ratified by the State legislatures of Kansas, Louisiana, Oklahoma, Nebraska, and Arkansas. I am very pleased that this has been done and that compact will be before us now and we will proceed to take action on these compacts.

Our next witnesses are John Beck, deputy director, external affairs, California Department of Health Services, Sacramento, CA; Dr. Terry Lash, director, Illinois Department of Nuclear Safety, Springfield, IL; Mr. Alan S. Johnson, under secretary of executive office of environmental affairs, Commonwealth of Massachusetts, Boston, MA

Gentlemen, we are very pleased to have you with us and shall we start with Mr. Beck and then the rest of you.

PANEL CONSISTING OF: JOHN BECK, DEPUTY DIRECTOR, EXTERNAL AFFAIRS, CALIFORNIA DEPARTMENT OF HEALTH SERVICES, SACRAMENTO, CA; DR. TERRY LASH, DIRECTOR, ILLINOIS DEPARTMENT OF NUCLEAR SAFETY, SPRINGFIELD, IL; AND ALAN S. JOHNSON, UNDER SECRETARY OF EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS, COMMONWEALTH OF MASSACHUSETTS, BOSTON, MA

Mr. **Beck**. Thank you, Senator, for having us here today. It is a pleasure to be here.

I have prepared a written statement.

The CHAIRMAN. Mr. Beck, would you care to have your entire statement put in the record and then give us the thrust of it in a few minutes.

Mr. BECK. I would very much appreciate that.

Mr. BECK. Essentially let me just update you with respect to where California is in the preparation and completion of the western compact with the State of Arizona. To date we do not have a compact with Arizona. In 1984 the Arizona Legislature passed the compact bill to us. We attempted last year to get it through the California Legislature and it failed. This year we have gone forward, have amended the compact to take care of many of the problems that were addressed in last year's language. I am pleased to report that Wednesday of this week it passed out of the first policy committee. It is scheduled to go to hearing in Senate Appropriations on Monday of next week. We anticipate that it will be off the Senate floor by a week from today.

We are hopeful that we can get this bill through our California Legislature prior to May 1 when the Arizona Legislature has a sine die, at which time they will reratify the compact and we will be forwarding it to this fine committee for complete ratification.

California is legally committed to site selection. The 1983 statutes committed us to prepare and identify and commence building a site, and we are in the process of doing that right at this very moment. We have intentions of doing that through the selection of a licensee. We have accepted bids. We are in court right now over the process of that bid selection. The judge is committed to a decision a week from today. At the completion of his decision we expect to be announcing the awarding of that license designation, at which time site selection for California will commence.

We need time, however. We need time in order to build the site. Our contractor applicants have promised that they can complete a site within 4 years. So we are looking at 1990, 1991 at the outside for California to have a site for the western regional compact area.

We are in complete support of this committee's passing of the compacts which it has before it. We need, frankly, pressure from Washington for us in the California Legislature to maintain its level of interest and commitment to getting us into a compact. The pressure that will be forthcoming from passage of the compacts which you have and others which will be coming is very helpful to us at this point in time.

We are also supportive of the amendments presented by Mr. Udall with respect to an extension of time. We would like to see those bills moving in a parallel fashion, not necessarily one before the other, because the combination of compacts being ratified and an extension of time with respect to our ability to take care of our own waste is very helpful.

Governor Damajian wants to be recognized as the person who is going to be a part of the solution to this problem and not a continuation of its problems, and that is why we are here. We appreciate the opportunity to be before you and we will answer any questions that we are able to do so.

Thank you.

The CHAIRMAN. Well, thank you very much, Mr. Beck, and we are very pleased to get that report and the optimism that you express here about a compact being developed between California and Arizona.

Mr. BECK. Thank you.

The CHAIRMAN. Do you have any other statement?

Mr. BECK. No, sir.

The CHAIRMAN. Thank you.

[Prepared statement follows:]

STATEMENT

BY

JOHN N. BECK
DEPUTY DIRECTOR FOR EXTERNAL AFFAIRS
CALIFORNIA DEPARTMENT OF HEALTH SERVICES

MR. CHAIRMAN, COMMITTEE MEMBERS: THANK YOU FOR THE OPPORTUNITY TO OFFER TESTIMONY ON THE PROSPECTS FACING CALIFORNIA WITH REGARD TO LOW-LEVEL RADIOACTIVE WASTE DISPOSAL.

MY NAME IS JOHN BECK; I AM THE DEPUTY DIRECTOR FOR EXTERNAL AFFAIRS, CALIFORNIA DEPARTMENT OF HEALTH SERVICES.

IN 1981, CALIFORNIA DISPOSED OF 186,600 CUBIC FEET OF LOW-LEVEL RADIOACTIVE WASTE. THIS IS APPROXIMATELY TWO-THIRDS OF THE WASTE PRODUCED BY STATES IN THE TWO NEIGHBORING INTERSTATE COMPACTS -- THE NORTHWEST AND THE ROCKY MOUNTAIN.

IN 1981, THE MIX OF OUR WASTES SENT TO COMMERCIAL DISPOSAL SITES WAS APPROXIMATELY 34% MEDICAL AND EDUCATIONAL, 27% INDUSTRIAL, 36% POWER PLANT, AND 3% GOVERNMENTAL WASTE. THE START-UP OF THREE NUCLEAR POWER UNITS SINCE 1983 AND INCREASED OPERATION OF THE SAN ONOFRE PLANTS OF SOUTHERN CALIFORNIA EDISON HAVE INCREASED THE POWER PLANT PERCENTAGE SOMEWHAT. MOST OF THE WASTE IS TRASH (PAPER, RAGS, CLOTHING) CONTAMINATED WITH TRACES OF RADIOACTIVE MATERIALS. WASTES FROM INDUSTRY ALSO CONTAINS DISCARDS FROM THE MANUFACTURE OF PRODUCTS SUCH AS RADIOPHARMACEUTICALS, AND LOW-LEVEL POWER PLANT WASTES INCLUDE ION EXCHANGE RESINS, FILTER SLUDGE AND METAL PARTS.

CURRENTLY, APPROXIMATELY 90% OF THE WASTE IS DISPOSED OF AT THE HANFORD, WASHINGTON SITE AND THE REMAINDER IS EXPORTED TO BEATY, NEVADA.

SITE DEVELOPMENT

CALIFORNIA IS LEGALLY COMMITTED (CHAPT. 1177 STATUTES OF 1983) TO THE DEVELOPMENT OF A DISPOSAL SITE ON STATE OR FEDERAL LANDS WITHIN ITS BOUNDARIES. WE PROPOSE TO ACCOMPLISH THIS THROUGH A LICENSE DESIGNEE WHO WILL

LOCATE A CANDIDATE SITE WHICH MEETS FEDERAL AND STATE CRITERIA, SELECT, CHARACTERIZE AND DEVELOP THE SITE, AND OPERATE THE FACILITY UNDER LICENSE CONDITIONS APPLIED BY THE STATE. A SELECTION PROCESS HAS TAKEN PLACE AND THE DESIGNEE SHOULD BE SELECTED AND NOTIFIED OF THE STATE'S DECISION WITHIN THE NEXT FEW DAYS. UNDER THE MOST OPTIMISTIC TIME LINES, AT LEAST THREE TO FOUR YEARS WILL BE NEEDED FROM THIS POINT ONWARD TO ACCOMPLISH ALL OF THE STEPS LEADING TO THE OPENING OF THE DISPOSAL SITE.

COMPACT STATUS

THE SAME LEGISLATION IN 1983 WHICH COMMITTED CALIFORNIA TO AN IN-STATE DISPOSAL SITE DIRECTED THE GOVERNOR TO DEVELOP COOPERATIVE ARRANGEMENTS WITH OTHER STATES, INCLUDING INTERSTATE COMPACTS. DISCUSSIONS WITH OTHER STATES HAD TAKEN PLACE PRIOR TO THIS FORMAL DIRECTIVE AND, QUITE LOGICALLY, THERE WAS NOT A GREAT DEAL OF ENTHUSIASM EXPRESSED BY OTHER STATES IN JOINING UP WITH THE LARGEST WASTE PRODUCING STATE IN THE WEST.

NEGOTIATIONS HAVE BEEN HELD WITH THE STATE OF ARIZONA OVER THE LAST TWO YEARS AND, EARLY IN 1984, COMPACT LANGUAGE WAS DEVELOPED FOR THE FORMATION OF THE WESTERN LOW-LEVEL RADIOACTIVE WASTE DISPOSAL COMPACT. THE COMPACT REQUIRED, OF COURSE, APPROVAL BY BOTH THE CALIFORNIA AND ARIZONA LEGISLATURES.

THE COMPACT WAS APPROVED BY THE ARIZONA LEGISLATURE IN 1984; AND I'M PLEASED TO REPORT THAT IT IS NOW PROGRESSING THROUGH OUR LEGISLATURE. WE EXPECT ITS PASSAGE WITHIN SIX WEEKS.

POST-1986 OPTIONS UNDER EXISTING LAW

THE PROSPECTS FACING CALIFORNIA AFTER THE 1986 DEADLINE ON THE USE OF EXISTING OUT-OF-STATE SITES ARE SOMEWHAT BLEAK. AS HAS BEEN POINTED OUT, AN IN-STATE SITE CANNOT BE BROUGHT ON LINE UNTIL 1989-90 AT THE EARLIEST. WE HAVE PREPARED AN ANALYSIS OF INTERIM STORAGE REQUIREMENTS AND COSTS FOR A FIVE-YEAR PERIOD. THE TOTAL ESTIMATED COSTS FOR A FACILITY TO STORE STABLE LOW-LEVEL WASTES AND INCINERATE UNSTABLE COMBUSTIBLE WASTES INCLUDING DECONTAMINATION COSTS WOULD BE APPROXIMATELY $13 MILLION. ANOTHER $6 MILLION WOULD BE NEEDED TO STORE INTERMEDIATE LEVEL WASTES SUCH AS REACTOR RESINS. THE TOTAL COST WOULD BE ABOUT THE SAME AS FOR A PERMANENT DISPOSAL SITE. EVEN BY STARTING TODAY, IT

WOULD NOT BE POSSIBLE TO OBTAIN ALL THE NECESSARY APPROVALS, MEET THE REQUIREMENTS OF THE CALIFORNIA ENVIRONMENTAL QUALITY ACT, OBTAIN PERMITS AND LICENSES AND DESIGN AND BUILD THE FACILITY BY THE 1986 DEADLINE.

ANOTHER OPTION WHICH IS UNACCEPTABLE FOR HEALTH AND SAFETY REASONS WOULD BE TO REQUIRE ON-SITE STORAGE OF LOW-LEVEL WASTES BY THE WASTE GENERATOR UNTIL A CENTRAL STORAGE OR DISPOSAL SITE COULD BE OPENED. MANY OF THE MORE THAN 150 WASTE GENERATORS WHICH CURRENTLY SHIP TO DISPOSAL SITES HAVE NO STORAGE CAPABILITY BEYOND THAT NEEDED BETWEEN SHIPMENTS. THE RESULT WOULD BE NUMEROUS LOCATIONS WHERE HEALTH AND SAFETY HAZARDS INCREASED AS THE WASTE ACCUMULATED.

STILL ANOTHER OPTION WOULD BE TO CLOSE DOWN MANY OF THE WASTE GENERATING OPERATIONS IN THE STATE; THIS IS AN OPTION WHICH WE ARE NOT INTERESTED IN PURSUING.

CALIFORNIA NEEDS

WE ARE WORKING WITH OTHER PARTIES THROUGH THE SPONSORSHIP OF THE NATIONAL GOVERNOR'S ASSOCIATION TO REFINE OUR APPROACH ON ACHIEVING VOLUME REDUCTION OF WASTES REQUIRING DISPOSAL AND TO PROVIDE INCENTIVES TO ASSURE THAT STEADY PROGRESS IS MADE ON DEVELOPING DISPOSAL SITES. IN CALIFORNIA, MECHANCIAL COMPACTION IS THE ONLY TECHNOLOGY CURRENTLY IN USE FOR VOLUME REDUCTION. ONE FACILITY IS INVESTIGATING THE POSSIBILITY OF INCINERATION AS A VOLUME REDUCTION TECHNIQUE, BUT AIR POLLUTION CONCERNS MAY SERIOUSLY LIMIT ITS WIDESPREAD USE. THE DEPARTMENT OF HEALTH SERVICES IS ENCOURAGING VOLUME REDUCTION BY WASTE GENERATORS THROUGH TRAINING PROGRAMS AND THE DEVELOPMENT OF WASTE MANAGEMENT HANDBOOKS FOR SPECIFIC WASTES.

CALIFORNIA'S MOST URGENT NEED RIGHT NOW IS SOME MORE BREATHING SPACE -- TIME TO GET EITHER A DISPOSAL SITE OR STORAGE FACILITY IN PLACE. WHILE WE MAY BE CRITICIZED FOR COMPLACENCY IN THE PAST, WE HAVE BEEN MOVING AS FAST AS WE CAN OVER THE PAST TWO YEARS ON THIS MATTER. THE PROPOSED AMENDMENTS TO THE LOW-LEVEL RADIOACTIVE WASTE POLICY ACT OF 1981 INTRODUCED BY REPRESENTATIVE MORRIS UDALL ON FEBRUARY 7, 1984 (H.R. 1083) WOULD PROVIDE THAT NEEDED TIME BY EXTENDING THE DEADLINE DATE FOR ACCESS TO OUT-OF-STATE SITES TO 1993.

CALIFORNIA STRONGLY ENDORSES EXTENDING THE DEADLINE DATE FOR ACCESS TO OUT-OF-STATE SITES TO 1993, BUT NO LATER, AS PROPOSED BY REPRESENTATIVE UDALL. HOWEVER, THIS MUST NOT DETRACT FROM THE NEED FOR CONGRESS TO RATIFY REGIONAL COMPACTS AS SOON AS POSSIBLE. UNLESS CONGRESS SO ACTS, STATES SUCH AS CALIFORNIA WILL BE VERY RELUCTANT TO ESTABLISH A SITE — ONE THAT COULD BE USED BY ALL IN THE ABSENCE OF A COMPACT.

THE NEEDS OF CALIFORNIA'S WASTE GENERATORS WILL BE MET. CALIFORNIA FULLY INTENDS TO MEET THAT NEED BY DEVELOPING A SITE IN THE STATE. CONGRESS NEEDS TO GIVE US BREATHING ROOM BEYOND JANUARY 1986 WHILE WE DEVELOP OUR SITE AND ASSURANCE THAT WE WILL ONLY BE REQUIRED TO ACCEPT WASTE FROM STATES WITHIN OUR COMPACT. THAT BREATHING ROOM AND ASSURANCE CAN BEST BE GIVEN BY: (1) ESTABLISHING A FINAL "DROP DEAD" DATE OF 1993; AND (2) TIMELY RATIFICATION OF ALL REGIONAL COMPACTS, AS THEY ARE INTRODUCED.

THANK YOU VERY MUCH.

The **Chairman**. Dr. Terry Lash, director of the Illinois Department of Nuclear Safety, we are very pleased to hear from you.

Dr. **Lash**. Mr. Chairman, with your leave I would like to have my entire statement entered into the record.

The **Chairman**. Without objection, that will be done and you can give us the thrust of the statement.

Dr. **Lash**. Thank you very much. Thank you very much for the opportunity to appear here today on a matter that is of vital importance to the State of Illinois.

In addition to being the director of the Illinois Department of Nuclear Safety, I am, pending confirmation by the Illinois State Senate, also a member of the commission established by the Central Midwest compact. The other two commission members are Clark Bullard from Illinois and Don Hughes from Kentucky. Mr. Hughes is in the audience today. The three of us appeared before Congressman Udall yesterday.

Governor Thompson is unable to appear here today. He is out of the country, but he appreciates very much the invitation you extended to him and he also appreciates the efforts of the chairman and others to solve this difficult national problem.

He has asked me to stress his personal interest in seeking prompt ratification of the central midwest compact which we expect to be introduced within 2 weeks in both the Senate and the House. We also seek congressional assistance to assure that the three operating commercial low-level waste disposal facilities remain open for a limited period of time to receive a restricted amount of waste from Illinois, and Kentucky's generators for the interim period that would be required for the development of a new low-level waste disposal facility in the State of Illinois.

We in Illinois understand well the burden shouldered in recent years by the State of South Carolina, the State of Washington, and the State of Nevada. Illinois did have a national low-level wastesite for several years and it is now filled to capacity and closed. It is still a source of concern to the public in Illinois. It makes us acutely aware of the issues being faced by these other host States.

The States of Illinois and Kentucky have made good progress since 1980. Both States have adopted a compact. As I mentioned, it should be introduced in Congress very soon. Commissioners have been appointed by the respective Governors. Illinois will be designated the host State for a facility. The State of Illinois has a very strong low-level radioactive waste management act that requires the Department of Nuclear Safety to study disposal technologies, to investigate potential sites, and to issue a series of regulations and criteria to assure that we have a disposal facility in Illinois as soon as possible. In fact, we expect to have a new facility opening by about 1991.

We have a strong staff. We have an assured funding mechanism. We have the support and confidence of the legislature and the Governor.

The State of Illinois and its low-level waste generators, of course, would like to have access to the existing disposal facilities without restriction until a new disposal facility is available, but we recognize and accept that there cannot be business as usual. Therefore, we propose four points that we would like Congress to support to allow for an interim period of access to the existing facilities:

One, establishment of firm ceilings on the volumes of waste that can be shipped to the existing facilities during the interim period of time.

Two, a short but realistic deadline for ending shipments permanently to the existing facilities.

Three, Federal assurance of substantial reductions in the volumes of waste shipped to existing facilities by requiring that all low-level radioactive waste produced at licensed nuclear-power reactors be stored on an interim basis until new disposal facilities become operational.

Four, the allowance for surcharges that will encourage reduction in the volumes of waste shipped by nonutility producers of low-level radioactive waste.

Finally, we would appreciate continued technical and small financial assistance from the U.S. Department of Energy during this interim period. The States have been faced with taking on a new difficult technological problem. In the past the technology development and study has been conducted by the Federal Government. That information should be efficiently transferred to the States as quickly as possible.

Thank you, Mr. Chairman, for the opportunity to appear here.

The **Chairman**. Thank you.

[Prepared statement follows:]

STATE OF ILLINOIS
DEPARTMENT OF NUCLEAR SAFETY
1035 OUTER PARK DRIVE
SPRINGFIELD 62704
(217) 546-8100

TERRY R. LASH
DIRECTOR

DAN L. WILLIAMS
DEPUTY DIRECTOR

STATEMENT

OF

TERRY R. LASH, PH. D.

Director, Illinois Department of Nuclear Safety
Commissioner, Central Midwest Interstate
Low-Level Radioactive Waste Compact

Mr. Chairman and members of the Committee. Thank you for the opportunity to appear here today on a matter of vital importance to the State of Illinois. My name is Terry R. Lash. I am the Director of the Illinois Department of Nuclear Safety, and I am, pending confirmation by the Illinois Senate, one of three voting members on the Commission established by the Central Midwest Interstate Low-Level Radioactive Waste Compact. The other two Commission members are Clark Bullard from Illinois and Don Hughes from Kentucky.

Governor James R. Thompson is unable to appear before you today, but he appreciates the invitation extended to him. He asked me to stress his personal interest in seeking prompt ratification of the Central Midwest Compact in conjunction with firm Congressional assurance that the three operating commercial low-level waste disposal facilities will allow limited access to Illinois' and Kentucky's generators for the interim period required for the development of a new low-level waste disposal facility in the State of Illinois.

Since passage of the federal Low-Level Radioactive Waste Policy Act of 1980, the State of Illinois and the Commonwealth of Kentucky have made good progress in fulfilling their responsibility to provide for the safe disposal of low-level waste produced within their region. The Central Midwest Interstate Low-Level Radioactive Waste Compact has been formally adopted by both states. The Compact will be introduced in both the House and the Senate very soon. Governor James R. Thompson has appointed Illinois' two voting members, who are subject to confirmation by the Illinois Senate, and Governor Martha Layne Collins has named

Kentucky's voting member to the Commission. The Commission plans to hold its first meeting on March 28, 1985, in Springfield, Illinois.

Under the provisions of the Compact, Illinois is responsible for siting a new regional disposal facility. Pursuant to the Illinois Low-Level Radioactive Waste Mangement Act of 1983, the Illinois Department of Nuclear Safety (IDNS) is developing rules and conducting studies to provide for the siting of this disposal facility by a private contractor. The Department has registered 255 producers of low-level radioactive waste in Illinois, and the Department is collecting a fee from them to assist in funding the low-level radioactive waste program and establishing an adequate long-term care fund for the disposal facility. The Commonwealth of Kentucky has only two major producers of low-level radioactive waste and their annual rate of production is less than 2% of Illinois' generators.

The State of Illinois urges Congress to ratify all interstate low-level radioactive waste compacts in the near future. Congressional ratification of compacts is necessary in order to continue progress in the establishment of new disposal facilitites. But, in addition to quick Congressional ratification of compacts, there is a fundamental need for states and regions without disposal facilities to maintain limited access to the existing three disposal facilities. The State of Illinois and the Commonwealth of Kentucky fully recognize that there cannot be "business-as-usual." The volumes of waste shipped to the existing facilities must decrease substantially beginning in 1986. The Central Midwest Commission supports implementation of a practical, safe and fair means for achieving a reduction that will meet the legitimate needs of the Northwest, the Southeast, and the Rocky Mountain Compact regions.

The State of Illinois during the past two years has participated in several meetings with officials from other states and regions, including those with operating disposal facilities, to consider a variety of issues and problems. Different approaches for resolving problem areas in implementation of the federal Low Level Radioactive Waste Policy Act have been explored, and to a significant degree satisfactory solutions have been agreed upon. Those discussions have not yielded complete agreement on all important matters, however.

The issue in most need of Congressional attention and solution concerns access after January 1, 1986, to the existing disposal facilities. The Illinois Department of Nuclear Safety believes that Congress should guarantee this needed access by amending the Low-Level Waste Radioactive Waste Policy Act of 1980, as suggested by Congressman Morris K. Udall in H.R. 1083. We believe that H.R.

1083, with our suggested changes, represents a satisfactory and attractive means of resolving the access question. A copy of the Department's suggested modification to Congressman Udall's bill is attached to this statement. In particular, the Department supports a four part Congressional approach to the access issue:

1. Establishment of ceilings on the volumes of waste that can be shipped to existing facilities.

2. A short, but realistic deadline (e.g., 1993) for ending shipments to existing facilities that cannot be further extended.

3. Federal assurance of substantial reductions in the volumes of waste shipped to existing facilities by requiring that all low-level radioactive waste produced at licensed power reactors be stored on an interim basis until new disposal facilities become operational.

4. Allowance for surcharges that will encourage further reduction in the volumes of waste shipped by non-utility producers of low-level radioactive waste.

These four measures would decrease by more than 40% the amount of waste shipped to the existing facilities during the interim period. Further reductions should not be required in order to maintain access after January 1, 1986. The four measures enumerated above are technically practical, legally and politically enforceable, and they are fair, because they distribute increased costs over large numbers of ratepayers. Moreover, because nuclear utilities already operate in a highly regulated environment, these measures do the least damage to firms that must compete in the open market.

The Illinois Department of Nuclear Safety rejects as less satisfactory means for achieving reductions in waste shipped, those options that rely entirely on voluntary interregional agreements or imposition of required volume reductions on non-utility producers of low-level radioactive waste. Open-ended negotiations on interregional agreements as currently provided for in H.R. 1083 are impractical, particularly during the limited number of months remaining before the interstate compacts must be ratified. And, most importantly, such negotiations cannot be left to a time after Congress ratifies the compacts, because the sited regions would have no incentive to agree to reasonable terms. Congress, therefore, should assure that interregional agreements, which may be needed to comply with the terms of some compacts, do not become a backdoor means for blocking access to the existing disposal facilities after January 1, 1986.

Volume reduction requirements on non-utility generators are also not desirable, because they are neither easily established nor readily enforced. Such requirements may in addition have significant unforeseen impacts on some companies that must compete in an international market. Finally, storage of wastes at some generators' facilities for several years raises concern about adequate protection of public health and safety.

In addition to interim access to the existing facilities, the Central Midwest Compact region seeks explicit Congressional approval of the Commission's right to restrict export of waste outside of its region. This authority is needed in order to assure that the new regional disposal facility in Illinois will be financially viable. Because advanced disposal technologies are required under the terms of the Compact, the private contractor developing and operating the regional disposal facility must be assured that it will not have to compete for the waste stream with less costly facilities that may be developed in other areas of the country.

A final key provision of a federal resolution of pending disposal problems is the legislated establishment of a federal program to provide financial and technical support to the states for the interim period until new disposal facilities are operating. We suggest strengthening the language in H.R. 1083 to clarify the federal commitment to assist states in carrying out their responsibilities. This is especially important to Illinois and Kentucky because of the prohibition of shallow land burial in the Central Midwest Compact. Federal research and development has not been detailed enough to resolve technical uncertainties about alternative disposal technologies. The resolution of these uncertainties is key to public support for and confidence in the siting process in Illinois as well as in other states and regions.

In sum, the State of Illinois urges Congress (1) to ratify all interstate compacts soon; (2) to require nuclear power licensees to store all of their low-level radioactive wastes beginning on July 1, 1986; (3) to provide federal financial and technical assistance to assure states and compact regions are able to develop new disposal facilities within a few years; and (4) to require compact regions with operating disposal facilities to accept, without further volume reduction requirements, low-level radioactive waste from non-utility producers of waste for an interim period.

MARCH 8, 1985

STATEMENT OF TERRY R. LASH

ATTACHMENT

PROPOSED CHANGES TO H.R. 1083,
AS INTRODUCED BY CONGRESSMAN UDALL

99th CONGRESS
1st Session

H.R.1083

To amend the Low-Level Radioactive Waste Policy Act to improve procedures for the implementation of compacts providing for the establishment and operation of regional disposal facilities for low-level radioactive waste, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

February 7, 1985

MR. Udall introduced the following bill; which was referred jointly to the Committees on Energy and Commerce and Interior and Insular Affairs

A BILL

To amend the Low-Level Radioactive Waste Policy Act to improve procedures for the implementation of compacts providing for the establishment and operation of regional disposal facilities for low-level radioactive waste, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,
That this Act may be cited as the "Low-Level Radioactive Waste Policy Amendments Act of 1985."

Sec. 2. The Low-Level Radioactive Waste Policy Act (42 U.S.C. 2021b et seq.) is amended by striking out sections 2, 3, and 4 and inserting in lieu thereof the following:

"Definitions

"Sec. 2. For purposes of this Act:

"(1) The term 'agreement State' means a State that (A) has entered into an agreement with the Nuclear Regulatory Commission under section 274 of the Atomic Energy Act of 1954 (42 U.S.C. 2021); and (B) has authority to regulate the disposal of low-level radioactive waste under such agreement.

"(2) The term 'atomic energy defense activity' means any activity of the Federal Government performed in whole or part in carrying out any of the following functions:

"(A) naval reactors development and decommissioning;

"(B) weapons activities including defense inertial confinement;

"(C) verification and control technology;

"(D) defense nuclear materials production;

"(E) defense nuclear waste and materials by-products management;

"(F) defense nuclear materials security and safeguards and security investigations; and

"(G) defense research and development.

"(3) The terms 'atomic weapon', 'source material', and 'special nuclear material' have the meanings given such terms in section 11 of the Atomic Energy Act of 1954 (42 U.S.C. 2014), as such section is in effect on January 1, 1985.

"(4) The term 'commercial nuclear power reactor' means a civilian nuclear powerplant required to be licensed under section 103 of the Atomic Energy Act of 1954 (42 U.S.C. 2133).

"(5) The term 'compact' means a compact entered into by two or more States pursuant to this Act.

"(6) The term 'compact commission' means the regional commission, committee, or board established in a compact to administer such compact.

"(7) The term 'compact region' means the area consisting of all States that are members of a compact.

"(8) The term 'disposal' means the isolation of low-level radioactive waste pursuant to the requirements established by the Nuclear Regulatory Commission under applicable laws, or by an agreement State if such isolation occurs in such agreement State.

"(9) The term 'Federal research and development activity' means any activity of the Secretary of Energy conducted at any research, development, or demonstration facility owned or operated by the Department of Energy.

"(10) The term 'generate', when used in relation to low-level radioactive waste, means to produce new low-level radioactive waste.

"(11) The terms 'high-level radioactive waste' and 'spent nuclear fuel' have the meanings given such terms in Section 2 of the Nuclear Waste Policy Act of 1982 (42 U.S.C. 10101) and as defined by the Nuclear Regulatory Commission, ~~as such section is in effect on~~ of January 1, 1985.

"(12) The term 'low-level radioactive waste' means radioactive material that--

"(A) is not high-level radioactive waste, spent nuclear fuel, transuranic waste, or byproduct material; and

"(B) the Nuclear Regulatory Commission, consistent with existing law, classifies as low-level radioactive waste.

"(13) The term 'regional disposal facility' means a low-level radioactive waste disposal facility in operation on January 1, 1985, or subsequently established and operated under a compact.

"(14) The term 'Secretary' means the Secretary of Energy.

"(15) The term 'State' means any State of the United States, the Ditrict of Columbia, and, subject to the provisions of Public Law 96-205, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, the Northern Mariana Islands, the Trust Territory of the Pacific Islands, and any other territory or possession of the United States.

"(16) The term 'transuranic waste' means radioactive waste contaminated with concentrations of transuranic elements greater than ~~the limit for transuranic waste established by rule by the Nuclear Regulatory Commission~~ 100 nanocuries per gram.

"Responsibilities for Disposal
Of Low-Level Radioactive Waste

"Sec. 3. (a) State Responsibilities.--Each State shall be responsible for providing, either by itself or in cooperation with other states, for the disposal of--

"(1) low-level radioactive waste generated within the State (other than by the Federal Government) that--

"(A) consists of or contains radionuclides specified in tables 1 and 2 of section 61.55 of title 10, Code of Federal Regulations, as in effect on December 27, 1982; and

"(B) contains concentrations of such radionuclides that do not exceed the concentrations permitted under such section 61.55 for Class C waste;

"(2) low-level radioactive waste described in subparagraphs (A) through (B) of paragraph (1) that is generated by the Federal Government, except that any State or compact region shall not be required to, but may, provide for disposal of any such waste that is generated--

"(A) as a result of any atomic energy defense activity or Federal research and development activity;

"(B) as a result of any research, development, testing, or production of any atomic weapon; or

"(C) outside the State or compact region by the Federal Government; and

"(3) low-level radioactive waste described in subparagraphs (A) and (B) of paragraph (1) that is required to be accepted for disposal under section 5.

"(b) Federal Responsibilities.--(1) The Federal

Government shall be responsible for ensuring the safe disposal of--

"(A) high-level radioactive waste and spent nuclear fuel, in accordance with the provisions of the Nuclear Waste Policy Act of 1982 (42 U.S.C.10101 et seq.);

"(B) low-level radioactive waste generated as a result of any atomic energy defense activity or Federal research and development activity;

"(C) low-level radioactive waste generated as a result of any research, development, testing, or production of any atomic weapon; and

"(D) all other radioactive waste material that is not a responsibility of the States under subsection (a), other than byproduct material defined in section 11 e. (2) of the Atomic Energy Act of 1954 (42 U.S.C. 2014(e)(2)), as such section is in effect on January 1, 1985.

"(2)(A) The Secretary of Energy shall~~, to the extent provided in appropriation Acts,~~ take such actions as may be necessary to ensure the safe disposal of any radioactive waste described in paragraph (1) for which --

"(i) disposal is not provided under other Federal law in effect on the date of the enactment of the Low-Level Radioactive Waste Policy Amendments Act of 1985; and

"(ii) the Secretary determines that no viable non-Federal disposal capability exists.

"(B) Not later than the expiration of the 12-month period following the date of the enactment of the Low-Level Radioactive Waste Policy Amendments Act of 1985, the Secretary shall submit to the Congress a comprehensive report setting forth the plan of the Secretary for carrying out the provisions of subparagraph (A). Such report shall include--

"(i) an identification of the radioactive waste material for which the Federal Government has responsibility under paragraph (1);

"(ii) an identification of whether disposal for such radioactive waste is provided under other Federal law in effect on the date of the enactment of the Low-Level Radioactive Waste Policy Amendments Act of 1985;

"(iii) an identification of whether viable non-Federal disposal capability exists for such radioactive waste;

"(iv) an identification of the radioactive waste for which the Secretary is required to ensure safe disposal under subparagraph (A);

"(v) a description of the action required to ensure the safe disposal of such radioactive waste;

"(vi) the proposed schedule of the Secretary for taking such actions;

"(vii) a description of the projected costs of taking such actions;

"(viii) the proposals of the Secretary for obtaining the funds necessary to take such actions; and

(ix) any recommendations of the Secretary for legislation to assist the Secretary in carrying out the provisions of subparagraph (A).

"Regional Compacts for Disposal
Of Low-Level Radioactive Waste

"Sec. 4. (a) In General.--(1) It is the policy of the Federal Government that the responsibilities of the States under section 3 for the disposal of low-level radioactive waste can be most safely and efficiently managed on a regional basis.

"(2) To carry out the policy set forth in paragraph (1), the States may enter into such compacts as may be necessary to provide for the establishment and operation of regional disposal facilities for low-level radioactive waste.

"(b) Applicability to Federal Activities.--(1)(A) Except as provided in subparagraph (B), no compact or action taken under a compact shall be applicable to the transportation, management, or disposal of low-level radioactive waste from atomic energy defense activities or Federal research and development activities.

"(B) Low-level radioactive waste generated by the Federal Government that is disposed of at a regional disposal facility shall be subject to the same conditions, regulations, requirements, fees, taxes, and surcharges imposed by the compact commission, or by the State in which such facility is located, in the same manner and to the same extent as any low-level radioactive waste not generated by the Federal Government.

"(2) Any facility established or operated exclusively for the disposal of low-level radioactive waste produced by atomic energy defense activities or Federal research and development activities shall not be subject to any compact or any action taken under a compact.

"(3) Nothing contained in this Act, or in any compact, may be construed to confer any new authority on any compact commission or State --

"(A) to regulate the packaging or transportation of low-level radioactive waste in a manner inconsistent with the regulations of the Nuclear Regulatory Commission or the Department of Transportation;

"(B) to regulate health, safety, or environmental hazards from source material, byproduct material, or special nuclear material;

"(C) to inspect the facilities of licensees of the Nuclear Regulatory Commission;

(D) to inspect security areas or operations at the site of the generation of any low-level radioactive waste by the Federal Government; or

"(E) to require indemnification beyond the provisions of chapter 171 of title 28, United States Code (commonly referred to as the Federal Tort Claims Act), or section 170 of the Atomic Energy Act of 1954 (42 U.S.C. 2210) (commonly referred to as the Price-Anderson Act), whichever is applicable.

"(4) Nothing contained in this Act, or in any compact, may be construed to limit the applicability of any Federal law or to diminish or otherwise impair the jurisdiction of any Federal agency, including the regulatory responsibilities of the Nuclear Regulatory Commission and the Department of Transportation.

"(c) Effectiveness of Authorities under Compact.--(1) Except as provided in paragraphs (2) and (3), each compact shall take effect in accordance with the provisions of the compact. Such provisions may restrict the use of the regional disposal facilities under the compact to the disposal of low-level radioactive waste generated within the region and may restrict waste generated within the region from being sent to storage,treatment or disposal facilities outside the region.

"(2) Any authority in a compact to restrict the use of the regional disposal facilities under the compact to the disposal of low-level radioactive waste generated within the compact region shall not take effect before each of the following occurs:

"(A) January 1, 1986;

(B) the Congress by law consents to the compact; and

"(C) the applicable effective date established in such law.

"(3) Any authority in a compact to restrict low-level radioactive waste generated within the compact region from being transported or disposed of outside the compact region shall not take effect before the Congress has by law consented to the compact.

"(d) Congressional Review.--Each compact shall provide that every 5 years after the compact has taken effect the Congress may by law withdraw its consent.

"Limited Availability of Regional Disposal Facilities for Low-Level Radioactive Waste Generated Outside Compact Region

"Sec. 5. (a) In General.--Subject to the limitations in subsection (b), each compact region that has a regional disposal facility in operation before January 1, 1985, shall, before the expiration of the ~~3~~9-month period following the date of the enactment of the Low-Level Radioactive Waste Policy Amendments Act of 1985, ~~offer to~~ enter into agreements with any compact region that does not have such a regional disposal facility in operation (and with any State that is not a member of a compact region and does not have a low-level radioactive waste disposal facility in operation) to allocate disposal capacity sufficient to meet the requirements of such compact regions (and States) through January 1, 1993, for the disposal of low-level radioactive waste generated in such compact regions (and States). ~~Each such offer to enter into agreements shall remain available for not less than a 9-month period.~~

"(b) Limitations.--The availability of regional disposal facilities under subsection (a) shall be subject to the following limitations:

"(1) The regional disposal facility located at Barnwell, in the State of South Carolina, shall ~~not~~ be required under subsection (a) in any year beginning after December 31, 1985, and ending January 1, 1993, ~~to dispose of more than 60 percent of the number of~~ provide for the disposal of 500,000 cubic feet of low-level radioactive waste received for disposal at such facility from outside the compact region ~~in 1983~~.

"(2) The regional disposal facility located at Hanford, in the State of Washington, shall ~~not~~ be required under subsection (a) in any year beginning after December 31, 1985, and ending January 1, 1993, ~~to dispose of more than 60 percent of the number of~~ provide for the disposal of 600,000 cubic feet of low-level radioactive waste received for disposal at such facility from outside the compact region in 1983.

"(3) The regional disposal facility located at Beatty, in the State of Nevada, shall ~~not~~ be required under subsection (a) in any year beginning after December 31, 1985, and ending January 1, 1993, to ~~dispose of more than~~ provide for the disposal of 150,000 cubic feet of low-level radioactive waste.

"(c) Surcharges.--(1) Each agreement entered into under subsection (a) may provide for a surcharge on any low-level radioactive waste disposed of under such agreement that is not in excess of the limits established in subsection (b). Such surcharge shall be in addition to the fees generally applicable for disposal of low-level radioactive waste in the disposal facility involved, and may not exceed $5 per cubic foot of low-level radioactive waste.

"(2) Each agreement entered into under subsection (a) may provide for a surcharge on any low-level radioactive waste disposed of under such agreement that is in excess of the limits established in subsection (b). Such surcharge shall be in addition to the fees generally applicable for disposal of low-level radioactive waste in the disposal facility involved, and may not exceed $10 per cubic foot of low-level radioactive waste.

"(d) Nondiscrimination.--Except as provided in subsections (b) and (c), low-level radioactive waste disposed of under an agreement entered into under subsection (a) shall be subject without discrimination to all applicable legal requirements of the compact region and State in which the disposal facility is located as if such low-level radioactive waste were generated within such compact region. Agreements entered into under subsection (a) may not limit or deny access to such facilities for reasons other than those specified in subsections (b) and (c).

"Assurance of Financial Responsibility

"Sec. 6. The Nuclear Regulatory Commission and each agreement State shall ensure that each low-level radioactive waste disposal facility licensed by the Nuclear Regulatory Commission or by such agreement State is covered by bonding or other financial assurance (from the commencement of operations through decommissioning and long-term care) that provides that all financial requirements of operating a safe and environmentally sound facility will be complied with, including any requirement for site closure and decommissioning or corrective action prior to the expected time of license termination due to economic or health and safety reasons.

"Volume Reduction Requirements"

Sec. 7. (a) In order that the facility limitations imposed by Section 5 (b) may be achieved in an expeditious and equitable manner, all commercial power reactor licensees are required to implement procedures to store all low-level radioactive waste for ten years beginning on July 1, 1986, or until they have access to a state or regional disposal facility other than the disposal facilities that were licensed to operate on January 1, 1985, whichever is sooner. The Nuclear Regulatory Commission shall issue a notice to all commercial power reactor licensees within 30 days of the effective date of this law notifying them of the storage requirements.

(b) The Nuclear Regulatory Commission may issue exemptions to the requirement of Section (a) if due to the specific circumstances of a licensee the implementation of such requirement would not be consistent with protection of public health and safety. In such case, the Nuclear Regulatory Commission must make the arrangements for disposal of the low level radioactive waste at a federal facility.

"Financial and Technical Assistance

"Sec. ~~7~~8. The Secretary shall~~,~~ ~~to the extent provided in appropriation Acts,~~ establish a program to provide to compact regions, States that are members of compacts, and States that are not members of compacts, that are determined by the

Secretary to require assistance for purposes of carrying out this Act--

"(1) continuing technical assistance to assist them in fulfilling their responsibilities under this Act; and

"(2) at least through the end of fiscal year 1993, financial assistance to assist them in fulfilling their responsibilities under this Act.

"Consultation and Cooperation of Federal Agencies

"Sec. 89. The Nuclear Regulatory Commission, the Secretary of Energy, and the Secretary of Transportation shall consult and cooperate with compact commissions and States in carrying out the provisions of this Act.

"Annual Report of Secretary

"Sec. 910. (a) In General.--The Secretary shall, not later than the expiration of each 5-year period following the date of the enactment of the Low-Level Radioactive Policy Amendments Act of 1985, prepare and submit to the Congress a comprehensive report regarding the operation of the national system for the managment and disposal of low-level radioactive waste. Such report shall include an evaluation of the use by Federal agencies of each low-level radioactive waste disposal facility established under a compact or by a State, and an estimate of the anticipated use of each facility by all generators of low-level radioactive waste.

"(b) Consultation Requirements.--Before preparing the report required in subsection (a), the Secretary shall consult with each compact commission, the chief executive officer of each State, the operators of low-level radioactive waste disposal facilities licensed by the Nuclear Reglatory Commission or an agreement State, the principle generators of low-level radioactive waste, and the transporters of low-level radioactive waste.".

Amendment to H.R. 1083

Offered by Mr. Udall

Page 1, strike out lines 3 and 4 and insert in lieu thereof the following:

Consent to Compact

Section 1. In accordance with section 4(a)(2) of the Low-Level Radioactive Waste Policy Act, the

Strike out section 2 of the bill and all that follows through the end of the bill and insert in lieu thereof the following new sections:

Congressional Finding

Sec. 2. The Congress hereby finds that the compact set forth in section 1 is in furtherance of the policy set forth in section 4(a)(1) of the Low-Level Radioactive Waste Policy Act.

Conditions of Consent to Compact

Sec. 3. The consent of the Congress to the compact set forth in section 1 is granted subject to the provisions of sections 3(a), 4, and 5 of the Low-Level Radioactive Waste Policy Act.

Effective Date of Exclusion Authority

Sec. 4. Any authority under the compact set forth in section 1 to restrict the use of regional low-level radioactive waste disposal facilities operated under such compact to the disposal of low-level radioactive waste generated within the compact region involved shall not become effective before the date on which ~~all~~ compact regions that have a regional disposal facility in operation on January 1, 1985, have entered into interregional agreements with each compact region or state which does not have a facility ~~subject~~ pursuant to the requirements of section 5 of the Low-Level Radioactive Waste Policy Act. ~~have complied with such requirements.~~

Congressional Review

Sec. 5. The Congress may alter, amend, or repeal this Act after the expiration of the 10-year period following the effective date established in section 4, and at such intervals thereafter as may be provided in the compact set forth in section 1.

The CHAIRMAN. Mr. Alan S. Johnson, we are pleased to hear from you.

Mr. JOHNSON. Thank you, Mr. Chairman. I would like to present an abbreviated version of my statement.

The CHAIRMAN. Without objection, the entire statement will be placed in the record, and you can give us the thrust of it in 1 minute or 2.

Mr. JOHNSON. Yes, sir.

The CHAIRMAN. Without objection, that will be done.

Mr. JOHNSON. I would like to thank you for the opportunity to appear before you today to discuss this most important environmental and economic issue. I am particularly pleased to be here because this hearing provides yet one more occasion for demonstrating my State's commitment to meeting the obligations imposed by the 1980 legislation. I have needed such occasions because, as you may be aware, Massachusetts had acquired a reputation among its sister States and some members of congressional staff as being either unwilling or unable to participate effectively in implementing the Low Level Waste Policy Act.

In particular, people have claimed that our referendum procedure would frustrate sighting efforts. Let me state emphatically that such reputation is undeserved and it is on its face refuted by the progress we have made through the joint efforts of legislative and administrative leadership and with participation of generators and public interest groups.

For example, under the effective chairmanship of State Senator Carol Amick, Massachusetts has produced a compact document for use by the administration in negotiating with other States and is well along in drafting a sighting act. Our generators have shown a willingness to help by practicing waste reduction such that Massachusetts no longer produces the highest amount of waste but has dropped to No. 5.

Moreover, time has revealed that Massachusetts' progress in changing its image has been coincident with the realization by other States of their own unique institutional requirements for developing additional disposal capacity, requirements which place other States in the same level or behind Massachusetts in progress toward siting. In fact, the urgency of these hearings, only months before the arrival of the 1986 deadline, is testimony to a nationwide failure to provide even 1 new cubic foot of disposal. So, in short, I am not here as a recalcitrant supplicant, asking for special treatment. Rather, I am here sharing a problem common to all States and regions: How can we make the 1980 act work?

And to make the act work I suggest we all need to address the realities of our situation; that is, the unacceptability of sited regions continuing to accept the same volume as pre-1986, and the unacceptability of unsited areas agreeing to compact approval with guaranteed interim access.

Several months ago Congressman Udall sent to each State a draft proposal which addressed these issues. The National Governors Association convened a series of meetings on the proposal, and as people in Massachusetts met we developed several recommendations based on several assumptions. The assumptions included the following: The unsited areas need to continue providing access until 1993, the date by adequate national disposal can be accomplished; the unsited areas need assurance of the access in either consent language or through amendments to the Waste Policy Act and not through reliance on good faith negotiation post-compact approval; the waste stream going to the three sites needs to be reduced by approximately one-half to assure adequate capacity; the sited areas need to be compensated for the capacity they are giving up; and the sited areas need assurance that 1993, or whatever date is chosen, is a firm date.

Many States, including Massachusetts, feel that we cannot support congressional consent without the issues inherently raised by these assumptions being resolved, and we feel that to be responsible we need to suggest a resolution.

To this end, we in Massachusetts for the most part agree with the approach developed over the course of the last several months by a group of States and regions convened by the National Governors Association. For example, we support a mandated combination of utility storage of all class A wastes and environmentally sound waste reductions of other major generators to accomplish volume reduction to the sited areas.

We support a cap with mandatory agreements as a precondition to consent to sited regions' compacts, and we support delaying congressional review of compacts until 1998 as a mechanism for assuring the sited areas that 1993 cannot slip.

We have not arrived at this position easily. Many of our generators feel that any reprieve is but another manifestation of lack of will. Many public interest groups feel that any reprieve is but another manifestation of inability to resolve adequately difficult environmental concerns. And there are problems in implementing the approach I have described. For example, how would allocation work, given the changes in waste stream characteristics and generation over time; what would the surcharge look like; and, although we in Massachusetts are confident of meeting our obligation, what will happen to the stored utility waste in any State or region which cannot meet the 1993 deadline? Will interim storage become permanent disposal?

But we support the plan developed at the various National Governors Association meetings because we cannot develop one better. We know the major underpinning of any plan must be waste stream reduction and access post-1986. We have examined State centralized storage, storage by nonutility generators, waste stream reduction, Federal responsibility and nonlegislated interregional/ State agreements.

Each seems fatally flawed either by kindliness considerations, administrative chaos or ambiguity.

I am confident that many of the individuals testifying today consider utility storage flawed as well, but as we have asked ourselves in Massachusetts what approach is better. Unless we are all prepared to revisit 1979, we have an obligation to develop a workable arrangement post-1986. I think many of the States and regions working together have begun to meet this obligation, and I know Massachusetts, among others, would be prepared to submit special language should the committee so desire.

Thank you, Mr. Chairman.

The **CHAIRMAN**. Mr. Beck, in discussing possible future courses of action you said that California is not interested in pursuing the closure of many of its generators of low-level waste. I realize this is not an attractive option. Nevertheless, if Barnwell, Hanford, or Beatty were to close would not some of your generators be forced to discontinue operations?

Mr. **BECK**. They could well be forced to close. At this point we are not interested in mandating their closure, however. We have encouraged at the department level through training the development of handbooks, serious efforts at volume reduction. Currently mechanical compaction is the only technology that is in use in California, and there is one facility which is investigating the possibility of incineration as a volume reduction technique. But air pollution concerns are seriously limiting its widespread application.

The CHAIRMAN. Dr. Lash, you have before you a chart, I believe, prepared by the Nuclear Regulatory Commission which shows the results of a survey of site storage capacity of each power reactor in this country. In view of the many differences among these generators, do you believe onsite storage should be required by Federal law or would it be more appropriate to set a cap and allow each region to allocate volume accordingly?

Dr. LASH. Mr. Chairman, we have no easy options before us. In light of the time that remains between now and January 1, 1986, I believe the most assured option, the option that will most assuredly provide a reduction in the shipment of low-level waste to the three existing sites is to have a Federal requirement that the electric utilities store all of their low-level radioactive waste. I do not believe there is time remaining to enter into voluntary agreements among the States. We have tried that for a couple of years without resolution.

The CHAIRMAN. Mr. Johnson, what specifically do you have in mind when you say a cap with mandatory agreements as a precondition to consent?

Mr. JOHNSON. Well, Mr. Chairman, I think that any extension to the 1986 deadline should contain a cap on wastes going to the three sites, such that there is specificity in their obligation and they are not subjected to an open-ended waste stream. But the process for agreement between the sited and nonsited areas must be part of the extension and not lead to negotiations which may or may not be successful. Therefore, I support the approach suggested by the legislation introduced by Congressman Udall which requires the sited areas to make offers of access, and that is what I mean by mandatory agreements.

The CHAIRMAN. Now I have a question I want to ask all of you. We will just start with you on the end and go down.

What is your State going to do with wastes generated in your State if the Barnwell, SC; Hanford, WA; or Beatty, NV, sites close or sharply reduce the amount of your wastes they are now taking?

Mr. BECK. Currently 90 percent of our waste is shipped to Hanford, WA, and the residual 10 percent goes to Beatty, NV. Very, very limited amounts go to Barnwell. Should Hanford close its site, we would be forced to implement a plan which was written in 1983 to develop interim storage facilities.

The problem that faces us, Senator, with that plan is, first, its approximate cost is $20 million which is about the cost of a permanent facility which we intend to build and, second, the production of such interim facility would require that we meet all of the aspects of the California Environmental Quality Act, the licenses, the designs and the building of the facility which is physically not possible by January 1986. We are very hopeful that does not occur.

The CHAIRMAN. We will be glad to hear from you, Dr. Lash.

Dr. LASH. Thank you.

We are positive in Illinois that a solution can be worked out in the time remaining; and while I have been here in Washington the last 2 days I have been encouraged by your remarks and Governor

Riley's remarks this morning. Congressman Udall is working hard on the problem. I do not think we will have to face a closure of those facilities and we should put all of our efforts into working out an agreeable resolution of this problem.

But if for some reason those discussions fail, the burden would fall on the generators in Illinois to find something to do, and they would have to undertake actions that would be acceptable to the U.S. Nuclear Regulatory Commission, to assure public health and safety. I would imagine that that would be very difficult to do because many hospitals, research institutions, pharmaceutical companies do not now have substantial space available to store their existing low-level waste for an extended period of time, and I do not, frankly, know what the resolution would be.

I think we would have a national crisis with important health and safety questions facing us all.

The CHAIRMAN. We will be glad to hear from you, Mr. Johnson.

Mr. JOHNSON. I would like to echo Dr. Lash's comments about the last couple days and, in fact, the last couple of months. I do not think that the closure will be necessary. I am confident we will be able to work out an arrangement between the sited and unsited areas. But should closure result it would be an economic and environmental disaster, I think, for Massachusetts and for the rest of the country, and I cannot even begin to speculate how the Massachusetts generators would begin to deal with that crisis.

The CHAIRMAN. I am sure you do not feel it is fair for South Carolina and Washington and Nevada to continue taking the waste for the whole Nation.

Mr. JOHNSON. No, sir, and that is why we in Massachusetts, along with the other States that are at the table and other States that are not here, are pledged to work our utmost to resolve this in an expeditious manner.

The CHAIRMAN. And if the result is they do close these three places, you would have a real crisis, would you not?

Mr. JOHNSON. That is correct.

The CHAIRMAN. Why has not Massachusetts acted before now in accordance with the 1980 act?

Mr. JOHNSON. Well, I think that the bottom line is that Massachusetts does not find itself in a position much different than any other State or any other region that does not have a disposal capacity. I think the reasons the hearings both on the House side and the Senate side are being held is because no region or State has been able to develop one cubic foot of additional capacity.

We are pledged in Massachusetts to meet our obligations just as the rest of the country is, but we feel we are no further behind than the rest of the country.

The CHAIRMAN. Well, you must be further behind because the southeastern region has had a compact here since last year. The Rocky Mountain area has a compact here. The Northwest has a compact. And you just heard me say Senator Dole has introduced a bill for the central region and Senator Grassley is going to introduce a bill for the Midwest. So they are all getting busy, it seems, but the Northeast.

Mr. JOHNSON. Well, sir, I suggest that the legislation requires States and not necessarily compacts to be responsible for disposal, and we in Massachusetts perhaps will have a compact after we determine what the State can do. We do feel that we are responsible. We accept the obligations of the legislation. We intend to fulfill those obligations.

The Chairman. But if you do not get started, when are you going to do it?

Mr. Johnson. I think we are started, Senator. We will have a compact document for you as soon as we determine what Massachusetts is prepared to do in terms of siting.

The Chairman. Suppose your State would be like Texas, just take your own waste if you do not want us to continue taking your waste. Do you think that is fair?

Mr. Johnson. It is not fair, but if you should offer that we certainly would accept. [Laughter.]

The Chairman. We feel like that we have been reasonable and flexible in taking Massachusetts' wastes and New York's waste and others, but you heard what the Governor said this morning. On January 1, 1986 unless these compacts are adopted and he is willing to give some flexibility, he is going to close it. Does that cause you excitement?

Mr. Johnson. That, among other things, Senator.

The Chairman. What are your hospitals going to do; what about your pharmaceuticals? You have got a lot of those things and generators. What are they going to do?

Mr. Johnson. I think I should state particularly in Massachusetts and other areas of the Northeast we have even a worse crisis than some of the other areas.

The Chairman. You mean your people do not want it?

Mr. Johnson. No.

The Chairman. We did not want it either.

Mr. Johnson. I think the sites that have accepted the wastes have been extremely reasonable and extremely fair. We in Massachusetts and I think no one in the Northeast is criticizing the States that have sites for not being fair and not having a disproportionate burden over the last several years, and our obligation which we fully intend to meet is to be fair ourselves, to produce additional disposal capacity. We are not asking for special treatment. We are asking that we be treated like the rest of the country and the realization be made that not only in Massachusetts or the other areas of the Northeast but there is no additional disposal capacity that will meet the 1980 act.

The Chairman. What if Massachusetts does not get busy and enter into a compact? You are asking for special treatment, are you not? These other States are entering into compacts, all those I mentioned. The others have them on the way.

Mr. Johnson. If, in fact, Massachusetts decides to develop its own disposal capacity and does not enter into a compact, then we would still not be asking for special treatment. We would suffer the consequences of having our own disposal facility.

The Chairman. How soon can we expect some decision up there?

Mr. Johnson. We intend to introduce siting legislation this year, Senator.

The Chairman. How soon?

Mr. Johnson. Certainly within the timeframe of 1993.

The **Chairman**. You want us to continue taking your waste for 8 more years?

Mr. **Johnson**. Only to the extent that you continue to take other wastes as well.

The **Chairman**. We do not intend to do that.

Mr. **Johnson**. Then not only does Massachusetts but the other areas have a problem as well.

The **Chairman**. We are putting you on notice now. I hope you heard the statements and testimony here today. Did you not?

Mr. **Johnson**. Yes, sir.

The **Chairman**. If these three sites close, what are you going to do? I repeat, what are you going to do? What are your hospitals going to do? What are your pharmaceutical researchers going to do and all those things?

Mr. **Johnson**. We have no answer.

The **Chairman**. Had you not better find one?

[No response.]

The **Chairman**. All right, you are on notice, are you not, and the rest of you are on notice. We do not intend to continue taking this low-level waste for the whole Nation. South Carolina is taking half of it. Well, our people say, no, why should we continue to take it for the whole Nation. Why do not other States take care of their own wastes, and that is what these compacts do. The different States have entered into a compact and they will alternate here and in that region they will decide how they are going to handle it, but they will agree to handle it. Your problem can be solved, but we cannot keep putting it off and I think any State is very unwise now that does not take steps immediately because we mean business.

Do you understand that, all of you?

Dr. **Lash**. Yes, sir.

The **Chairman**. We mean business.

Thank you.

Mr. **Johnson**. Thank you.

The **Chairman**. You are now excused.

I have a few questions here for the record if you would be kind enough to answer.

[Prepared statement and answers to written questions follow:]

The Commonwealth of Massachusetts
Executive Office of Environmental Affairs
100 Cambridge Street
Boston, Massachusetts 02202

MICHAEL S. DUKAKIS
GOVERNOR

JAMES S. HOYTE
SECRETARY

Alan S. Johnson
Undersecretary

March 5, 1985

TO: THE SENATE JUDICIARY COMMITTEE

MR. CHAIRMAN, MEMBERS OF THE COMMITTEE:

Thank you for the opportunity to appear before you today to discuss this most important environmental and economic issue. I am particularly pleased to be here because this hearing provides yet one more occasion for demonstrating my state's commitment to meeting the obligations imposed by the 1980 legislation. I have needed such occasions because as you may be aware, Massachusetts had acquired a reputation among its sister states and some members of congressional staff as being either unwilling or unable to participate effectively in implementing the Low Level Waste Policy Act. In particular, people have claimed that our referendum procedure would frustrate siting efforts. Let me state emphatically that such reputation is undeserved and is on its face refuted by the progress we have made through the joint efforts of legislative and administration leadership and with participation of generators and public interest groups. For example, under the effective chairmanship of State Senator Carol Amick, Massachusetts has produced a compact document for use by the Administration in negotiating with other states, and is well along in drafting a siting act. And our generators have shown a willingness to help by practicing waste reduction such that Massachusetts no longer produces the highest amount of waste but has dropped to number five. Moreover, time has revealed that Massachusetts' progress in changing its image has been coincident with the realization by other states of their own unique institutional requirements for developing additional disposal capacity - requirements which place other states at the same level or behind Massachusetts in progress toward siting. In fact, the urgency of these hearings -- only months before the arrival of the 1986 deadline -- is testimony to a nationwide failure to provide even one new cubic foot of disposal. So in short I am not here as a recalcitrant supplicant, asking for special treatment. Rather, I am here sharing a problem common to all states and regions: How can we make the 1980 act work?

And to make the act work I suggest we all need to address the realities of our situation: That is, the unacceptability of sited regions continuing to accept the same volume as pre-1986, and the unacceptability of unsited areas agreeing to compact approval without guaranteed interim access. Several months ago Congressman Udall sent to each state a draft proposal which addressed these issues. The National Governor's Association convened a series of meetings on the proposal, and as people in Massachusetts met, we developed several recommendations - based on several assumptions. The assumptions included the following:

- The sited areas need to continue providing access until 1993, the date by which adequate national disposal can be accomplished;
- the unsited areas need assurance of the access in either consent language or through amendments to the Waste Policy Act -- and not through reliance on good faith negotiation post compact approval;
- the waste stream going to the three sites needs to be reduced by approximately one-half to assure adequate capacity;
- the sited areas need to be compensated for the capacity they are giving up; and
- The sited areas need assurance that 1993, or whatever date is chosen, is a firm date.

We in Massachusetts agree with the approach to many of these issues developed at the NGA meetings. For example, we support a combination of utility storage of all A wastes and environmentally sound waste stream reductions of other major generators to accomplish volume reduction to the sited areas; we support a cap with mandatory agreements as a precondition to consent to sited regions' compacts; and we support delaying congressional review of compacts until 1998 as a mechanism for assuring the sited areas that 1993 cannot slip.

We have not arrived at this position easily: many of our generators feel that any reprieve is but another manifestation of lack of will; many public interest groups feel that any reprieve is but another manifestation of inability to resolve adequately difficult environmental concerns. And there are problems in implementing the approach I have described. For example, how would allocation work, given the changes in waste stream characteristics and generation over time; what would the surcharge look like; and - although we in Massachusetts are confident of meeting our obligation - what will happen to the stored utility waste in any state or region which cannot meet the 1993 deadline. Will interim storage become permanent disposal?

But we support the plan developed at the various National Governors' Association meetings because we cannot develop one better. We know that the major underpinning of any plan must be waste stream reduction and access post '86. We have examined state centralized storage, storage by non-utility generators, waste stream reduction, federal responsibility and non-legislated inter-regional/state agreements. Each seems fatally flawed either by timeliness considerations, administrative chaos, or ambiguity. I am confident that many of the individuals testifying today consider utility storage flawed as well, but as we have asked ourselves in Massachusetts, what approach is better. Unless we all are prepared to revisit 1979, we have an obligation to develop a workable arrangement post '86. I think many of the states and regions working together have begun to meet this obligation, and I know Massachusetts, among others, would be prepared to submit special language should the Committee so desire.

Let me also spend a few minutes discussing my perception of how we arrived at this point - five years after enactment. I think there are three principal reasons for the inability of states and regions to develop additional capacity: they are the workings of the political process; the compact process; and the lack of experience and uncertainty about standards and operations.

The political process: Elected officials, much as radioactive materials, have half-lives; several states limit gubernatorial service to one or two terms. Therefore, a controversial issue coming up during the term of a sitting governor, but which need not be addressed until the term of a successor or until a sitting governor's lame duck term, tends to be put off. And so it should not be surprising that many governors took office in 1982 with the low level waste disposal issue largely unaddressed. And because issues of this magnitude most often require gubenatorial attention before being given to agencies for implementation, there was little institutional memory to bring to the newly elected governors. In short an issue such as this takes several years to break through institutional inertia.

The Compacts: And the focus on compacts only compounded the problem. States need not develop siting processes if they will not have a site, and most every state participating in compact negotiations hoped that it would not be designated host. Thus, completed compact negotiations on host state selection process and obligations of host/member states was a precondition to development of individual state siting processes. This additional bureaucratic layer delayed actual siting efforts in many compact regions and became - in part - a reason for the breakdown in compacts.

Lack of Experience: A further delay results from most states' lack of experience in providing disposal capacity. States traditionally regulate; this is the first instance I am aware of where states are given responsibility for disposal. This anamoly with other waste streams is more obvious when the complete regulatory scheme is analyzed. With RCRA, the Clean Air Act, etc., the Federal Government retains authority to step in if the state does not perform adequately; no such authority was retained in the Waste Policy Act. This means that the states have no federal models to follow in developing specific siting procedures, evaluating technology, etc. Given that three of the six commercial sites have been closed, and that the remaining three are served by technology thought to be inappropriate for many regions, no real state model exists either. This means that each state had a significant learning curve problem in acquiring information and experience within the time requirements of the Waste Policy Act.

But having identified problems causing delay, let me also report that progress is being made. In Massachusetts, as I mentioned earlier, we have produced a compact and are well on the way to developing a siting process. We are committed to providing disposal capacity for our generators in an environmentally sound and timely manner. The commitment comes from both the Legislature and the Administration and is supported by generators and environmental groups.

Finally, for your information I have attached a chart indicating the projected flow of wastes through 1993 - assuming continued access. Of course, if the proposals suggested earlier in my testimony are adopted, the flow would change.

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1985-1993
1. TOTAL WASTE	217,689	312,394	259,236	159,203	180,348	116,400	117,300	118,200	119,100	120,000	121,000	122,000	123,000	124,000	1,081,000
UTILITY TOTAL	111,465	62,895	89,000	29,000	117,200	72,300	72,300	72,300	72,300	72,300	72,300	72,300	72,300	72,300	650,700
A	102,102	57,612	81,524	26,564	107,500	66,227	66,227	66,227	66,227	66,227	66,227	66,227	66,227	66,227	596,043
B & C	9,363	5,283	7,476	2,436	9,700	6,073	6,073	6,073	6,073	6,073	6,073	6,073	6,073	6,073	54,657
NON-UTILITY TOTAL	106,224	249,499	170,236	130,203	63,148	44,100	45,000	45,900	46,800	47,700	48,700	49,700	50,700	51,700	430,300
2. DESTINATION**															
BARNWELL TOTAL	139,065	127,795	133,300	62,800	133,600	83,800	84,100	84,300	84,600	84,800	85,100	85,300	85,500	85,850	763,350
UTILITY TOTAL*	111,465	62,895	89,000	29,000	117,200	72,300	72,300	72,300	72,300	72,300	72,300	72,300	72,300	72,300	650,700
A	102,102	57,612	81,524	26,564	107,500	66,227	66,227	66,227	66,227	66,227	66,227	66,227	66,227	66,227	596,043
B & C	9,363	5,283	7,476	2,436	9,700	6,073	6,073	6,073	6,073	6,073	6,073	6,073	6,073	6,073	54,657
NON-UT. TOTAL	27,600	64,900	44,300	33,800	16,400	11,500	11,800	12,000	12,300	12,500	12,800	13,000	13,300	13,550	112,750
RICHLAND TOTAL	70,100	164,700	112,300	85,900	41,700	29,400	30,000	30,600	31,200	31,800	32,500	33,100	33,800	34,500	286,900
UTILITY TOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
B & C		0	0	0	0	0	0	0	0	0	0	0	0	0	0
NON-UT. TOTAL	70,100	164,700	112,300	85,900	41,700	29,400	30,000	30,600	31,200	31,800	32,500	33,100	33,800	34,500	286,900

[*] Both utilities send all but the most occasional load of waste to Barnwell.

[**] Destination totals for Barnwell and Richland do not add to "TOTAL WASTE": the difference is shipped to Beatty, Nevada.

ANSWERS TO QUESTIONS FOR DR. TERRY R. LASH
FROM THE SENATE JUDICIARY COMMITTEE - MARCH 8, 1985

QUESTION 1:

You have expressed support for utility on-site storage of waste, would this not prove to be prohibitively expensive to the industry as a whole, and also pose safety and health concerns due to the numerous sites and additional handling?

ANSWER:

The States of South Carolina, Washington and Nevada have stated that immediate, significant steps must be taken to reduce the volume of waste currently being shipped for disposal at the three existing disposal sites. I appreciate those states' concerns, and I feel that the other states must adopt measures to meet the needs of the sited states. However, there are health and safety concerns and considerable expense involved with any of the methods that have been proposed for achieving the needed reductions. We should seek to implement practical measures that distribute these increased costs equitably and, at the same time, minimize risks to health and safety.

Utility on-site storage is the best interim solution in terms of evenly distributing cost, since increases would be distributed over large numbers of rate payers. Imposing shipping reductions on other kinds of low-level waste generators would focus the costs on a few categories of individuals who use medical facilities, conduct research, manufacture radiopharmaceuticals or otherwise utilize radioactive materials. Such requirements might also have significant unforeseen impacts on some companies that must compete in an international market, and they could cause damage to firms that must compete in an open, free market. Nuclear utilities, on the other hand, already operate in a highly regulated environment.

With respect to health and safety, storage of wastes at non-utility generators' facilities for perhaps ten or more years would raise more serious concerns than would be raised by mandatory utility storage. Utilities already have competent engineering, health physics and managerial personnel who can assure the safe storage of all reactor produced low-level radioactive waste for an extended interim period. The same assurances could not be made if reductions were required of non-utility generators. Also, by requiring only utilities to store waste, the number of new interim storage facilities would be kept small, making regulatory control easier and thereby further assuring a high level of protection of the public health and safety.

QUESTION 2:

You have before you a chart, prepared by the Nuclear Regulatory Commission, which shows the results of a survey of site storage capacity for each power reactor in this Country. In view of the many differences among these generators, do you believe on-site storage should be required by Federal law, or would it be more appropriate to set a cap and allow each region to allocate volume accordingly?

ANSWER:

The State of Illinois confidently believes that on-site utility storage is the single most effective and fair means for reducing the amount of low-level radioactive waste shipped to the existing disposal facilities. Implementation of such an interim storage program by the utilities with nuclear power reactors would reduce the total amount of waste shipped to existing disposal facilities by about 40% overall.

However, for such a program to work, it will have to be mandated by Federal law. Neither states nor regional compact commissions have the the legal authority to enforce allocation programs that might be developed on their own. Moreover, requiring reductions by categories of producers of low-level radioactive waste other than utilities would raise more questions about safety, practicality, and fairness. Even if legal authority did exist, regulatory control would be extremely difficult, costly and complex.

That mandated utility storage can work is evidenced by the volume reduction and interim storage program that has been initiated in Illinois by Commonwealth Edison Company (CECO). CECO generates approximately 70% of the low-level radioactive waste in the Central Midwest Region. Thus, its efforts toward reducing amounts of waste shipped have a particularly large impact on the total that needs to be sent out of the region during the next few years. The most important component of CECO's plan in this regard is the proposed construction this year of interim storage facilities capable of storing all of its low-level radioactive waste until a new disposal facility is operational in Illinois.

With the successful implementation of CECO's volume reduction and interim storage plans, and with the ongoing volume reduction efforts of Illinois' and Kentucky's other generators of low-level radioactive waste, the Central Midwest Region will need only limited access to existing disposal facilities beginning in 1986 and extending to about 1993.

I agree that the utility storage requirement should be accompanied by yearly ceilings on the amount of low-level waste disposed of at the existing sites. However, enforcement of these ceilings should be accomplished through provisions written into Federal law and should not be left either to allocation plans or open-ended negotiations among the sited and unsited regions. Neither development of allocation plans nor negotiations on interregional agreements are practical given the very limited time remaining before the compacts must be ratified. In addition, they cannot be left to a time after Congress ratifies the compacts because there would be no incentive for sited regions to agree to reasonable terms.

QUESTION 3:

Do you think that the volume ceilings should remain fixed through 1993, without any decrease which would encourage speedier site development in unsited regions?

ANSWER:

There must be incentives for sited regions to develop their own diposal facilities quickly. Decreasing the ceilings between now and 1993 is one possible approach. However, I believe a better alternative would be to create incentives through the use of surcharges. More specifically, I advocate the approach currently being considered by the ad hoc negotiating group meeting under the sponsorship of the staff of the National Governors' Association (NGA). Under this approach, a surcharge on waste disposed of at the three existing sites would become effective on January 1, 1986. The surcharge would be increased on specified dates prior to 1993 for those unsited regions which had not reached certain milestones by those dates. The milestones would reflect progress toward developing a low level waste disposal facility within the region.

QUESTION 4:

If the exclusionary date were extended to 1993, wouldn't we be encouraging further delay and complacency?

ANSWER:

The Central Midwest Compact Region has not been guilty of delay and complacency. There has been much progress made in other regions as well.

Under the provisions of the Central Midwest Compact, Illinois is responsible for siting a new regional disposal facility. Pursuant to the Illinois Low-Level Radioactive Waste Mangement Act of 1983, the Illinois Department of Nuclear Safety is developing rules and conducting studies to provide for the siting of this disposal facility by a private contractor. The Department has registered 255 producers of low-level radioactive waste in Illinois, and the Department is collecting a fee from them to assist in funding the low-level radioactive waste program and in establishing an adequate long-term care fund for the disposal facility.

Failure to extend the exclusionary date to 1993 would jeopardize the compact approach to disposal that was established by the Federal act. There are no viable near-term alternatives to this approach. Adoption of another approach at this stage would undo all of the efforts to make the compact system work, and Illinois' planning efforts for a disposal facility would be seriously delayed.

The Illinois Department of Nuclear Safety and the Central Midwest Compact Commission are working as hard as possible to assure quick development of a state-of-the-art disposal facility in Illinois. This level of work will not be diminished by a transition period lasting until 1993. But if an adequate transition period were not assured, or if additional responsibilities, such as siting interim storage facilities, were imposed, this progress would be significantly impeded, and the basic goal of establishing a new disposal facility in Illinois as soon as possible would be thwarted.

QUESTION 5:

Would the surcharge which you propose actually prompt site development, or would it simply penalize generators and consumers?

ANSWER:

In conjunction with other incentives and restrictions, the surcharge will encourage volume reduction and prompt site development, especially under a system such as the one described in my answer to question 3. In addition to surcharges, there must be ceilings on the volume of waste that can be shipped to existing facilities as well as a short but realistic deadline (e.g., 1993) after which shipments to existing facilities absolutely cannot be made. This deadline must be written into the law in the clearest terms possible with no escape clauses. In this way, unsited regions will be on notice that the new deadline is absolute and irrevocable.

QUESTION 6:

What would Illinois do if Barnwell, Hanford or Beatty were to close?

ANSWER:

Illinois does not have a viable alternative if the compact approach proves unsuccessful and existing sites close. Closing the sites would cause great turmoil and uncertainty that would jeopardize the safe storage and disposal of low-level radioactive waste. There would undoubtedly be a seriously adverse effect on Illinois' low-level waste generators. Illinois' planning efforts for a new disposal facility would be seriously delayed while resources were devoted to addressing the emergency caused by the closure of the existing sites. Not only would costs be substantially increased by closure, significant threats to public health and safety might develop as well. The outcome of such actions by the existing disposal sites is highly uncertain, but assuredly negative.

The **Chairman**. Dr. Robert E. Henkin, if you will come around, director of Nuclear Medicine, Foster G. McGaw Hospital, Maywood, IL; Dr. E. Linn Draper, executive vice president, external affairs and production division, Gulf State Utilities, Inc., Beaumont, TX.

I see Dr. Henkin and Dr. Draper. Now, who is the other gentleman?

STATEMENTS OF A PANEL CONSISTING OF DR. ROBERT E. HENKIN, DIRECTOR OF NUCLEAR MEDICINE, FOSTER G. McGAW HOSPITAL, MAYWOOD, IL, ON BEHALF OF THE AMERICAN COLLEGE OF NUCLEAR PHYSICIANS AND THE SOCIETY OF NUCLEAR MEDICINE, ACCOMPANIED BY CAPT. WILLIAM H. BRINER (U.S. PUBLIC HEALTH SERVICE, RETIRED) SOCIETY OF NUCLEAR MEDICINE; AND DR. E. LINN DRAPER, JR., EXECUTIVE VICE PRESIDENT FOR EXTERNAL AFFAIRS AND PRODUCTION, GULF STATES UTILITIES CO., ON BEHALF OF THE UTILITY NUCLEAR WASTE MANAGEMENT GROUP, THE EDISON ELECTRIC INSTITUTE, THE AMERICAN NUCLEAR ENERGY COUNCIL

Captain **Briner**. I am with Dr. Henkin.

The **Chairman**. We are very pleased to have you gentlemen here. We thank you for coming.

Do you have any written statements?

Dr. **Henkin**. Yes, sir.

The **Chairman**. Dr. Henkin, would you mind putting your entire statement in the record, and very briefly give us the thrust of it?

Dr. **Henkin**. Yes, sir.

Mr. Chairman, members of the committee, I am Robert E. Henkin, a practicing nuclear medicine physician. I am professor of radiology at Loyola Stritch School of Medicine and director of nuclear medicine at the Foster G. McGaw Hospital, a 500-bed teaching and research hospital. In addition, I currently serve on the board of regents and as chairman of the Government Affairs Committee of the American College of Nuclear Physicians.

Appearing with me today is Capt. William H. Briner, who is chairman of the Government Relations Committee of the Society of Nuclear Medicine. Captain Briner is an associate professor of radiology, and director of radiopharmacy and nuclear medicine laboratory of the Duke University Medical Center.

On behalf of our organizations, we thank you for this opportunity to address this most important issue—congressional ratifications of interstate compacts for low-level waste management. In the interest of time, I will present the statement for both organizations.

The society represents over 11,000 physicists, technologists, chemists, radiopharmacists, and physicians. The society is dedicated to the overall advancement of nuclear medicine, and has major interests in scientific, educational and research activities affecting nuclear medicine and low-level waste issues.

The American College of Nuclear Physicians is a professional organization representing 1,200 physicians whose primary activity is the practice of nuclear medicine. Many of our members have been involved in the formation of compacts and siting of disposal areas following the passage of the Low-Level Waste Policy Act of 1980. The combined membership of these two organizations is this country's nuclear medicine community.

Our primary purpose in appearing before this committee today is to discuss the medical implications associated with low-level radioactive waste management and the importance of adequate disposal facilities for the continued delivery of heath care services in this country.

Before I discuss the substance of our comments, permit me, Chairman Thurmond, to express our sincere appreciation and compliment you for the leadership you have demonstrated over the past years on this issue. The introduction by you on the first day of the new Congress of S. 44, the southeast interstate low-level radioactive waste management compact, again demonstrates the priority you have given this matter. We are grateful for your efforts.

The message we bring before the committee today is presented from the perspective of clinicians and other professionals working in the field of nuclear medicine. We will not deal with certain of the provisions contained in the various compacts that may be considered technical in nature, nor some of the recent discussions regarding waste volume levels.

For example, we would not suggest that States with disposal sites should take 1 million cubic feet a year of low-level waste versus 800,000 cubic feet, or some other number. We recognize that the Congress and State officials are trying to resolve these questions. We would suggest that the concept of establishing some form of national cap or total volume level which the existing host States could work with does appear to be a reasonable approach.

However, we do have very definite views on several issues associated with the low-level waste disposal question.

First, the medical applications of radioactive materials are not just a matter of importance to the speciality of nuclear medicine. While it is true that there are an estimated 120 million nuclear medicine procedures performed annually, Low-Level Radioactive Waste Management Handbook Series: An Introduction, August 1983, U.S. Department of Energy [DOE/LLW-3a] in the United States, this represents only one of the important contributions that radioactive materials make to health care. It is not common knowledge that perhaps as much as 30 percent of all biomedical research is dependent on radioactive tracers.

Further, radioactive markers are used on the development of approximately 95 percent of all the prescription drugs in America. The data submitted to FDA by drug manufacturers is heavily dependent on the use of such tracers. We will briefly elaborate on these points later in the statement.

It is critical that the Congress and other interested parties understand the significance and clinical applications radioactive materials have in the delivery of health care services and to realize that radioactive materials do in fact permeate every aspect of American medical practice. We sincerely believe that failure to develop additional sites and/or any disruption in the availability of existing disposal capacity will have a serious and negative impact on the delivery of health care services and the cost of these services in this country, not just our specialty.

Second, we do feel that every effort should be made to obtain congressional approval during this session of Congress for the compacts already submitted. This should help push the more dilatory States forward to continue their efforts to comply with congressional intent as set forth in the 1980 Low-Level Waste Policy Act.

Third, while it is clear that no new sites will be available by the end of this year, the 1986 exclusionary authority permitted after congressional ratification should be maintained in some fashion. However, perhaps it would be appropriate to provide a few years grace period under certain conditions for continued access to a host State following the 1986 exclusionary date until the operation of a new disposal facility is online. Linked to such an arrangement should be appropriate surcharges and provisions to press the nuclear Regulatory Commission and the agreement States for rapid approval of new sites, although not at the expense of necessary public health and safety or environmental concerns.

Fourth, we urge that federally generated biomedical waste, such as that from Veterans' Administration facilities, and from the National Institutes of Health, which historically have been accepted by existing disposal sites, be permitted access to continuing and new sites.

Allow me to elaborate briefly on the value of radioactive materials in the practice of medicine.

Nuclear medicine includes three general divisions: Diagnostic imaging, in vitro or laboratory tests, and therapy. Imaging, often called scanning, involves the administration of small amounts of radioactively labeled drugs, or radiopharmaceuticals, to patients. Sensitive equipment presents the distribution of these substances as an image, either still or dynamic, which is used to establish the presence or absence of disease. Such methods are used to examine the brain, lungs, liver, heart, bones, gall bladder, thyroid gland, blood vessels and lymphatic system, among others. These procedures are noninvasive, essentially pain free, and generally deliver much smaller radiation doses to the patient than do comparable x-ray procedures. They are highly cost-effective, also.

Laboratory or in vitro—in glass—procedures involve use of minute radioactive chemicals that react with the patient's body fluids without administration of radiactivity to the patient. These irreplaceable tests are used to determine levels of hormones, vitamins and drugs; to detect the presence of pregnancy; the presence and recurrence of certain cancers; and specific diseases such as hepatitis. A very important application is the measurement of an enzyme level in the blood which indicates a recent heart attack.

Radioisotope therapy is the administration of larger amounts of radiopharmaceuticals which localize in a particular place in the body, for the destruction of diseased tissue. The most common application is the use of radioactive iodine to treat hyperthyroidism—overactivity of the thyroid gland—and thyroid cancer. In the next 3 to 5 years, it is anticipated that specific therapy with radiolabeled therapeutic antibodies will become available, opening whole new vistas in the treatment of cancer.

In addition to the excellent analytical results and sensitivity provided by nuclear medicine procedures, it should be noted that alternatives to these procedures, where they exist, are usually more invasive, carry a greater risk to the patient, and/or cost substantially more.

For example, if a nuclear medicine heart function study could not be performed, the alternative would be cardiac catheterization. Including hospitalization—required for cardiac catheterization, but not nuclear medicine procedures—the total costs would approximate 10 times that of the nuclear medicine heart study.

Another example is cancer of the breast, the commonest cancer in women. An unfortunately large percentage of these women already have spread of the cancer to the bones at the time their breast lump is discovered. In many of these women, the early involvement of bone by cancer can only be diagnosed by a nuclear medicine study. Nuclear technicians can detect these changes 6 to 18 months before conventional x rays. If this nuclear medicine imaging procedure were not available, many women could be subject to disfiguring surgery, under the misconception that cure was still possible. The demonstration of tumor spread by the nuclear medicine study enables physicians to limit the surgery and to institute prompt alternative means of treatment early to limit the spread of disease.

Other population groups that could be seriously impacted by the reduction of nuclear medicine services would be the poor and the patients in small rural hospitals. Because of the high cost of alternative diagnostic techniques, such as CT scanning, many of the hospitals that serve these populations do not have alternative diagnostic modalities available. Thus, nuclear medicine services are crucial to the effective medical management of their patients.

Indeed, the availability of nuclear medicine diagnostic services is required for hospital accreditation.

Low-level waste disposal affects all these applications in two ways: First is our direct production of waste, both liquid and solid, including materials used in administering radiopharmaceuticals to patients, contaminated gloves and absorbent materials used in patient care, vials of laboratory reagents, laboratory carcasses, and unused or outdated supplies of radiopharmaceuticals. Such materials from hospitals and laboratories account for 12 to 15 percent of the total volume, but only a very small percentage of the total radioactivity. Much of this material is subject to volume reduction and onsite storage; hospital waste in particular is mostly of short half-life. The hospital community over the last several years has progressed toward onsite decay. Onsite decay is now a common hospital procedure.

Perhaps more critical is the hidden aspect of medical waste, that produced by the manufacturers of radiopharmaceuticals. These materials, of somewhat greater activity, would exceed, according to industry representatives, available onsite storage by manufacturers within 1 to 6 months should there be any closing of low-level waste disposal sites. We fear the probable cessation of radiopharmaceutical manufacture due to the unfavorable economic climate that could result from the failure to find a reasonable solution to the waste problem and complete stoppage of all the medical activities discussed, despite any heroic efforts which might be made if such a situation should arise.

The college and society have a longstanding involvement in the issue of low-level waste management. The college has established and trained a speakers bureau of over 100 physicians and scientists to inform and educate the general and medical public on the issues we are discussing today, recognizing the prevalence of misconceptions about radioactivity in general, and waste disposal, in particular, which make such an effort necessary.

In addition to these efforts, many of our members, as I mentioned, have been active on the State scene with compact formation, site selection, and dealing with State legislature. We have become aware of the difficulties already surmounted in shepherding cooperative language through these bodies in the face of provincial jealousies. Many State legislators feel that the States have now done their part in meeting the requirements of enabling legislation.

Based on our experience, should the Congress add new language, at this time, which dramatically alters the compacts, second consideration may face greater hostility in the legislatures, particularly if it appears that the additions would primarily benefit States which have not previously acted. We realize that you are sensitive to this situation, but we wanted to reinforce it.

In conclusion, Mr. Chairman, the college and the society recognize the concerns of the people in those States which currently have low-level radioactive waste management sites. Certainly, the medical community does not suggest that any one, or even a few, States bear the responsibility for managing all the low-level radioactive waste in this country. We also understand the difficult problems faced by you in the Congress in terms of approving the compacts.

The college and the society strongly support a comprehensive and fair national policy for the development of regional, low-level radioactive waste management sites as envisioned in the Low-Level Radioactive Waste Disposal Act. Since the need for waste management is increasing with the growth of nuclear medicine and other nuclear technologies, it is important that the Congress and this committee act expeditiously. From our perspective as physicians and scientists, your actions will have a most significant impact on the continued availability of critically important medical services and the development of new therapeutic and diagnostic services.

The college and the society offer the expertise in nuclear medicine of their memberships to the committee in whatever way this may be helpful. We greatly appreciate this opportunity to offer our views, and will be pleased to answer any questions.

The CHAIRMAN. Thank you very much.

Dr. Henkin, I have a few questions. On account of the shortage of time, would you just answer these for the record?

[Information follows:]

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American
College of
Nuclear
Physicians

SNM
The Society
of Nuclear
Medicine

March 19, 1985

Mr. Pete Kulmala
Legislative Assistant
Senator Strom Thurmond's Office
218 Russell Senate Office Building
Washington, DC 20510

Dear Pete:

Here are the College and Society's answers to the questions posed by Senator Thurmond during the March 8 hearing on low-level waste compacts. Please let me know if you require additional information.

QUESTIONS FOR ROBERT E. HENKIN, M.D.
AMERICAN COLLEGE OF NUCLEAR PHYSICIANS

Q: Much of the discussion today has focused on volume-reduction and on-site storage. If stringent volume standards were proposed, would the medical community be able to achieve further, substantial volume reductions?

A: Although minimal additional volume-reduction in medical low-level waste volume may be possible, substantial volume reductions are not feasible. If one looks at volume-reduction already accomplished by medical institutions, it becomes clear further reductions are not reasonable. For example, in 1978, 21,300 cubic meters of low-level waste were disposed by institutional generators (medical plus academic); this represents 25.4% of the total volume of low-level waste generated during that calendar year. In 1983, 4,916 cubic meters of low-level waste were disposed by the medical and academic generators; this represented 5.8% of the total low-level waste generated and disposed during 1983. This represents more than a four-fold reduction in five years. Further, most institutions have already employed mechanical compaction of waste and sorting for on-site decay, and it is highly unlikely that further reductions could be achieved.

Q: What is your understanding of the medical community's present ability to engage in greater on-site storage and decay?

A: Currently, the medical community is storing on-site all low-level waste having a half-life suitable for storage for decay. Generally speaking, the only waste shipped off-site is that which we are unable to handle, such as animal carcasses or materials of moderately long half-life. The animal carcasses contain tracer quantities of radioactive materials with half-lives too long to permit storage for decay. Storage of these animals would require deep-freeze temperatures, further compounding the problem.

The commercial radiopharmaceutical manufacturer is also quite limited in his ability for on-site storage. The industry estimates a one-to-six month reserve if waste sites were shut down.

Q: Insofar as licensees have the responsibility for handling or disposing of their waste, what would your hospital, or the average medical generator, do if Barnwell, Hanford or Beatty were to close?

A: In our opinion, it is unlikely that any of these sites will close, if timely Congressional consent is obtained for the inter-state reginal compacts already submitted to Congress. If consent is not obtained in a timely fashion, it is quite likely that all three sites will close, which will constitute an acute national emergency for all sectors which generate low-level waste. This obviously will include medical institutions and hospitals.

Some hospitals have a standby plan that would be put into effect if such a calamity were to occur. Those efforts would be directed at keeping patient services available for the longest possible time. One likely immediate consequence would be the cessation of all medical research using animals since these experiments produce a significant storage and volume problem. Patient care involving radiopharmaceuticals might continue for three-to-six months, but as the radiopharmaceutical companies ran out of on-site storage, they too would be forced to shut down, cutting off our source of supply. At that point we would have reduced the 120 million examinations per year to a mere trickle, forcing physicians to use more expensive or higher risk technology to obtain the information now produced from Nuclear studies. In some cases, the physicians would be unable to get diagnostic information they require because it is only available from Nuclear studies.

Pete, thank you for giving us an opportunity to testify at the hearings. I look forward to working with you as the Congressional approval of the compacts progresses.

Sincerely,

Michael Payne
Director, Government Relations

MP/sb
cc: Robert E. Henkin, M.D.
Capt. William H. Briner (Ret)

The Chairman. Dr. Draper?

Dr. Draper. Yes, sir.

The Chairman. Do you have a written statement?

Dr. Draper. Yes, I do.

The Chairman. Would you like for your whole statement to be put in the record?

Dr. Draper. Yes, sir.

The Chairman. Would you give us, very briefly, the thrust of it?

Dr. Draper. Yes, sir.

Mr. Chairman and members of the committee, I am pleased to have the privilege of appearing before you today to testify on the regional low-level radioactive waste disposal compact consent legislation currently before the Congress.

My name is E. Linn Draper, Jr., and I am executive vice president for external affairs and production of Gulf States Utilities Co. I am also former chairman of the utility nuclear waste management group, which consists of 40 publicly owned and investor-owned electric utilities formed to monitor and assist in the resolution of nuclear waste management issues.

My testimony is being presented on behalf of UNWMG, as well as the Edison Electric Institute and the American Nuclear Energy Council. EEI is the national association of investor-owned electric utilities, whose members serve 73 percent of all ultimate electric utility customers in the Nation. ANEC represents more than 100 organizations having an interest in nuclear power, including private, public and cooperatively owned utilities, manufacturers, architect-engineers and firms performing various nuclear fuel cycle activities. UNWMG, EEI and ANEC have previously testified before this committee on the regional compact. We have actively endorsed the program established by the Low-Level Radioactive Waste Policy Act, and have consistently urged prompt congressional approval of the compacts.

We would like to express our appreciation to the chairman for his consistent leadership role on the low-level waste disposal issue. Furthermore, we would like to reaffirm our commitment to the regional compacting process, and to prompt congressional approval of the compacts.

When the Policy Act was passed by Congress in 1980, it was anticipated that States, either individually or collectively, through regional compacts, would have sufficient time to develop low-level waste disposal capacity, so that by January 1986, regions with presently operating disposal sites could begin reducing and restricting the disposal of waste from outside their respective regions.

Much progress has been made since the passage of the Policy Act. For instance, over 30 States have enacted legislation to join regional compacts, and 5 regional compacts were introduced in Congress last year for ratification. However, while a great deal of progress has been made in establishing organizational mechanisms to create regional compacts, progress in the development of additional disposal sites has been disappointingly slow. This has been due to a number of technical, regulatory, and institutional factors.

In the chairman's February 21 remarks, he indicated that the objective of today's hearing would be to delineate those issues which remain to be resolved and to identify proposed solutions so that consent legislation could be promptly reported to the full Senate. We strongly endorse that objective.

Accordingly, we would like to focus on what we believe to be the principal issue to be addressed prior to congressional consent to compacts, and to identify in general terms, an approach which would, in our opinion, be both practicable and equitable.

Clearly, the principal issue which has impeded prompt congressional approval of the compacts is the question of access to the existing disposal facilities pending the development of new disposal capacity. We acknowledge the desire of those States currently hosting disposal facilities to significantly reduce, and ultimately exclude waste generated outside their respective regions. Their legitimate interests must be recognized however this issue is resolved.

Furthermore, we favor action that would facilitate the development of new disposal capacity and believe that the impetus toward the development of such capacity must be maintained. Equally important, however, is the need to ensure that adequate disposal capacity remains available for all the low-level waste generated in the country.

EEI, UNWMG, and ANEC believe that assurance of adequate disposal capacity should be provided for waste generated outside the sited regions for an additional, limited period of time, and that the concerns of the States currently hosting disposal sites can be met without imposition of onerous and unworkable restrictions on the disposal of waste generated in nonsited regions and States. Equally important, we believe that those objectives can and should be achieved while maintaining pressure for the prompt development of new disposal capacity.

Maintenance of such pressure is an essential element in whatever resolution of the low-level waste disposal issue is chosen. Legislation must include a mechanism that will ensure the prompt development of new disposal capacity. In that regard, we believe that provisions establishing a timetable for the development of new disposal capacity warrant serious consideration. Such a timetable would set specific goals or objectives against which progress toward new site development could be monitored. It could include dates for: (1) submission of a compact to Congress for approval; (2) selection of a specific site; and (3) initiation of commercial operation.

At the present time, proposals are circulating in the South Carolina Legislature to close the Barnwell facility by the end of the year, and in the U.S. Congress to immediately reduce, by a substantial amount, the volumes of waste currently being received at the Barnwell and Richland sites from outside the southeast and northwest regions.

We believe that reasonable and timely reductions in the volumes of waste exported to the existing disposal facilities are warranted. The level of volume reduction necessitated by these proposals, however, would be extremely difficult, if not impossible to achieve given currently available volume reduction facilities, past volume reduction efforts by generators, and limited storage capacity. Maintenance of such volume reductions will become even more difficult to achieve over the next several years, as a substantial number of new generators come on line. Thus, under such proposals, there would be no available disposal facility for a significant percentage of the waste generated in the country, and the need for interim storage of large amounts of waste would be created.

Any proposal necessitating large-scale interim storage would be undesirable for numerous reasons:

First, the Policy Act contemplates permanent disposal of all low-level waste at a small number of regional disposal facilities. Temporary storage would be inconsistent with the intent of the act.

Second, storage of large amounts of waste could reduce the incentive for prompt development of new disposal facilities. We believe that storage will increasingly be viewed as a "solution" rather than an interim measure. Legislation should encourage the development of new disposal capacity in the shortest possible time consistent with the public health and safety, rather than create the need for costly interim measures.

Third, requiring storage and subsequent disposal of waste would not benefit the public health and safety, and would increase worker exposure, contrary to the efforts of NRC licensees to attempt to maintain radiation exposures "as low as is reasonably achieveable." Movement of waste directly from its source of generation to the permanent disposal facility would limit handling, and result in prompt permanent isolation of waste from the environment.

Fourth, given the difficulty in determining precisely when new disposal facilities will be available, there is no assurance as to when stored waste will be removed to permanent disposal facilities.

Fifth, interim storage is unlikely to be a publicly acceptable alternative. Significant opposition can be anticipated from local communities, State governments and intervenor groups.

Finally, the costs of creating interim storage capacity for large quantities of waste are not justified by any offsetting enhancement in the level of protection to the public health and safety.

Based on these factors, we do not believe that any proposal necessitating large-scale, temporary storage of low-level waste is in the public interest.

Instead, we would support orderly and reasonable reductions in waste volumes to the existing sites, and a firm, but realistic closure date, after which such sites could be assured that they may exclude all out of region waste.

Legislation could require reductions of exported volumes to each existing disposal facility on the order of 10 percent per year for 4 years, rather than an immediate 40 percent reduction as required by the proposed legislation currently before the House. Each generator should be responsible for reducing its own exported volume to each facility by 10 percent per year.

To preclude inequities caused by selection of a baseline year that might be unduly high or low for a particular waste generator, it is suggested that the baseline upon which the 10 percent reductions would be based utilize an average of the waste disposed of during the last 3 years of record, namely 1982, 1983, and 1984. New sources of waste generation would have to meet similar requirements.

First year quantities for new generators could be based upon the average waste quantities generated by like facilities. In 1993, further access, if any, to existing sites by nonsited States and regions could be negotiated by the affected parties. Some assurance that adequate disposal capacity will be available at that time should be provided.

Implementation of volume reduction provisions requiring each generator to be responsible for ensuring that it reduces its own shipments to each disposal site by 10 percent per year over existing levels, would result in more reasonable volume reduction requirements, and would permit the generators and the regional commissions to readily monitor compliance with those requirements.

Establishment of a closure date of 1993, coupled with a provision authorizing Congress to alter, amend, or repeal the legislation after that time, would provide a firm closure date for the States hosting the existing facilities, would maintain momentum for the development of new disposal capacity, and provide a reasonable opportunity to develop such sites.

Adequate disposal capacity during the facility development period would also be assured. Finally, moderate surcharges for exported waste may be an appropriate mechanism for encouraging the reduction of waste volumes.

In closing, we would like to emphasize that low-level waste is the byproduct of numerous medical, educational and industrial activities which improve the health and quality of life for millions of Americans. Any effort to resolve the concerns which have prevented prompt congressional action on the compacts must take into account the likelihood of disrupting such activities and the overall effect on the health and welfare of the public. We offer our assistance in your deliberations. I would be pleased to answer any questions that you may have.

The **Chairman**. Do you think you could get the State of Texas to move?

Dr. **Draper**. Yes, sir.

The **Chairman**. How soon?

Dr. **Draper**. Well, there has been good progress in selecting a region for the site. There are proposals in the State legislature now to go forward with that. I would doubt that the facility would be in place before 1990, or shortly thereafter. It simply takes time.

The **Chairman**. 1990?

Dr. **Draper**. Yes, sir.

The **Chairman**. Five years?

Dr. **Draper**. Yes.

The **Chairman**. Why would it take so long?

Dr. **Draper**. It will take that time to get the environmental approval, and get the consent of the regulatory bodies. I think that will take——

The **Chairman**. Why did you not start in 1980, and you would have it through by now?

Dr. **Draper**. That is absolutely correct.

The **Chairman**. The States had better move. If they do not, they will suffer the consequences. Suppose we close these three sites we have now? The other two States, I understand, would follow South Carolina, probably, and close theirs when we close ours, unless these compacts are adopted, and some flexibility could be given if they are adopted to extend the time some, but not until 1992 or

1993. That is too long. But what would happen in your State, if these three closed?

Dr. **Draper**. I think it would be a disaster, not only for the States outside the regions, but probably for those that currently have sites, because you, as well, are dependent on things that happen in the other States in this country.

I think it would be tragic if we lost the ability to manufacture pharmaceuticals, to generate electric power, and other things. We have to find a solution.

The **Chairman**. Why did not the States start when this law was passed, and not depend on those three sites?

Dr. **Draper**. Senator, I think, as you well know, a number of States have been responsible in pursuing the formation of compacts. As you have indicated, a number are now before the Congress for their ratification. I think that shows that they are moving, it is a time-consuming process.

The **Chairman**. Well, it had 5 years so far, 1980 to 1985. I hope you all understand that we are not just trying to make threats, because actions are going to be taken. They are going to be taken in my State, so the Governor says. I understand they will be taken in Washington State and Nevada.

So I hope that you can take the message back that they had better get busy at once. If we can get these compacts signed, then I think something could be worked out for an extension of time from January 1, 1986, to several years later. The Governor of South Carolina indicated that he might agree to 3 years. But to go from now to 1992 or 1993 is just too long. See if you cannot get it done in 3 years, and that is 3 years longer than the law called for.

Thank you very much for your appearance.

We will keep this record open for 10 days, for any statements or questions that anybody cares to propound and place in the record.

We now stand adjourned.

[Whereupon, at 12:40 p.m., the committee adjourned, sine die.]

APPENDIX

TESTIMONY OF

THE CENTRAL INTERSTATE LOW-LEVEL RADIOACTIVE WASTE COMPACT COMMISSION

By:

Dr. L. Hall Bohlinger, Louisiana
Chairman

and

Raymond J. Peery
Executive Director and General Counsel

March 8, 1985

Mr. Chairman, members of the Committee:

It is our pleasure to submit testimony on behalf of the Central Interstate Low-Level Radioactive Waste Compact Commission. We are especially pleased that your Committee is taking action to address the issues of congressional consent to the compacts developed in response to the policy established by the Low-Level Radioactive Waste Policy Act (Public Law 96-573).

INTRODUCTION

The Central Interstate Low-Level Radioactive Waste Compact was developed in response to the policy established in the Low-Level Radioactive Waste Policy Act that placed responsibility for low-level radioactive waste disposal on the states. The compact has been ratified by five member states: Arkansas, Kansas, Louisiana, Nebraska, and Oklahoma. The Compact Commission organized and began performing its duties in June 1983. Since its organization, the Commission has established an office, hired staff, begun a site exclusionary study, and requested congressional consent to the Compact.

The Central Interstate Low-Level Radioactive Waste Compact was introduced for consent in the 98th Congress in the form of H. R. 3002 and S. 1581. As the Committee is aware, the 98th Congress failed to consent to any of the compacts because of issues that remained unresolved between the parties at interest. During the 98th Congress, the Commission had the opportunity to address many of the issues relevant to the congressional consent process. The Commission addressed those issues in testimony before this Committee and the House Committee on Energy and Commerce. The Central Interstate Low-Level Radioactive Waste Compact has been introduced for consent in the 99th Congress. The legislation is sponsored by Mr. Dole in the form of S.655. Companion legislation has been introduced by Mr. Glickman, et. at., in the form of H. R. 1046.

The Commission requests that the Congress consent to the Central Interstate Low-Level Radioactive Waste Compact. We understand that there are issues which remain unresolved that go to the heart of establishing a regional low-level radioactive waste management system, and are confident that these issues can be resolved in the form of amendments to the Low-Level Radioactive Waste Policy Act and specified consent language. We are in basic agreement with the approach offered by Chairman Udall of the Committee on Interior and Insular Affairs, Subcommittee on Energy and Environment, in the form of H. R. 1083, and believe that the legislation provides the frame work for addressing the issues which remain unresolved. We have addressed specific issues relating to H. R. 1083 and proposed consent language, and submit this for your information.

SPECIFIC ISSUES

Post 1985 Disposal - Access to Existing Disposal Facilities and Allocation Levels.

The Low-Level Radioactive Waste Policy Act as originally enacted, provides that a state with a disposal facility that is in a compact which has been consented to by the Congress, may, after January 1, 1996, refuse to accept waste not generated within its compact region. It is clear that on January 1, 1986, no new disposal capacity will have been developed. The three states presently "hosting" disposal facilities will continue to have the only disposal capacity in existence on January 1, 1986. Those same three states indicated in 1979 that they no longer intend to be the nation's low-level radioactive waste dumping ground. As an alternative to a threat of immediate closure of their facilities, they agreed to a grace period for acceptance of waste until 1986. It was assumed that new disposal capacity could be developed by 1986; however, the process of developing compacts, subsequent state enactment, congressional consent, and facility development has proven to be more time consuming than originally thought.

The three states with sites continue to make it clear that they must be relieved of the burden of being the nation's waste disposal sites. While it may be argued that these three states have the disposal capacity necessary to meet the needs of the nation for quite some time, it is unreasonable to expect them to continue to shoulder the entire burden of waste disposal indefinitely. The Congress recognized this principle when it enacted the Low-Level Radioactive Waste Policy Act.

As a result of the failure to develop new disposal capacity throughout the country, it will be necessary for the existing low-level radioactive waste disposal sites to continue accepting waste beyond January 1, 1986. A compromise must be reached between those regions and states without disposal sites and those regions with disposal capacity for the continued access to that capacity. We recommend that the Congress provide by legislation that the existing disposal facilities continue to accept waste from non-sited regions and states until January 1, 1993. This should provide sufficient time to develop new disposal capacity throughout the country.

While we propose that the states with existing facilities continue accepting waste until 1993, we do not believe that they should be compelled to take one-hundred percent of the waste being generated. The solution requires equity between all the parties. In order to alleviate the burden of the states with existing facilities which come as a result of continued waste acceptance, we propose that a "cap" be placed on the amount of out-of-region waste that must be accepted at each facility.

We are confident that a reasonable cap for each facility can be arrived at through negotiations between the sited regions, the non-sited regions and states, and the Congress. There have been discussions concerning the reasonableness of certain cap amounts. We believe the matter can be resolved quickly if the Congress indicates a willingness to consent to the compacts this year.

Having concluded that it will be necessary for the existing facilities to continue accepting waste, and that a cap should be placed on the amount of waste to be accepted, it becomes necessary to establish a mechanism for assuring that the caps will be complied with.

The amount of waste shipped for disposal must be reduced if such a system is to work. There has been considerable discussion about methods of reducing the amount of waste shipped for disposal. One proposed solution is for generators to reduce the amount of waste necessary for disposal by incineration, compaction, or other technologies. It has not been determined how much of the waste stream can be reduced through these types of technologies. In addition it is uncertain who would have the authority to enforce such reduction. Any legislation requiring reduction of the waste stream must provide for the authority to enforce the reduction requirements. If such reduction is to take place at the regional level, it would be appropriate to empower the compact commissions to enforce the system.

It has also been proposed that commercial power reactors be required to store their waste on-site. Proponents of this solution argue that on-site storage by utilities represents a quick and readily identifiable method of reducing the amount of waste shipped for disposal. Surveys of the total waste stream indicate that such on-site storage could reduce the overall waste stream by approximately fifty-five percent. While on its face on-site storage by utilities may be a quick and simple solution to the problem, it is also a very costly solution. The utility companies within our region have indicated that the cost of developing on-site storage at each reactor is between four and six-million dollars. This cost does not include the costs associated with ultimate disposal. In addition at the end of the on-site storage period, each utility will have a significant amount of waste that will have to be disposed of at a newly developed regional facility. This may create a burden on the facility operator not originally anticipated.

The utility companies in our region have indicated that they do not favor on-site storage as a solution to the issue of reducing the waste stream. They are however, worried about the prospect of not having disposal capacity after 1985. For this reason, some of the utilities in our region have developed plans for on-site storage of their waste. These plans should not be misinterpreted to indicate their support for the on-site storage alternative. Our utilities have indicated that they would prefer the alternative of waste reduction through technology.

The Commission has examined both alternatives for reducing the waste stream. Economically, it appears that reduction through technology may be the preferred method for large generators. The costs associated with reduction may cause hardship on the smaller generators that are not financially capable of funding such technologies. In addition, we have not yet heard arguments that alleviate our concerns regarding enforcement mechanisms.

The alternative of on-site storage by utilities would be costly to the utilities and ultimately their rate payers. This does not however, dispel the argument that this solution would be quicker and more efficient to implement than any other. It may be that some combination of storage by large generators and reduction by medium sized generators can be achieved and result in a solution that is acceptable to the generators and the sited regions.

We would caution that if utilities are required to store waste on-site, provision should be made for continued access to disposal capacity for class "B" and "C" waste. Such waste accounts for approximately ten percent of the total utility waste stream; however, the cost for on-site storage of class "B" and "C" waste is significantly higher than class "A" waste. In addition while all classes of waste can be stored, it is more prudent from a health and safety standpoint to ship "B" and "C" waste for disposal as soon as possible.

The primary concern of the generators is that they be assured of continued disposal capacity. The sited regions are concerned that new disposal capacity must be developed in a timely manner. We recommend that any solution to the post 1985 disposal issue provide that non-sited regions and states develop a siting schedule that establishes specific time tables and milestones. Such schedules should address the concerns of the generators and sited regions. It must be emphasized however, that the schedules can not be subject to unwarranted delay. One deadline has already been missed. If the system is to be creditable, a final deadline must be established and complied with.

Whichever solution is mandated to reduce the waste stream must take into consideration the need to minimize the cost to generators. For their part, the generators of waste must realize that it is their waste we are attempting to find disposal capacity for. They must be willing and able to do their part to solve the problems so that new disposal capacity can be developed. These issues have been discussed for the past four years. It is time for the Congress to enact appropriate legislation. We can ill afford to continue debates that provide no solutions. We believe that it is possible for the sited and unsited regions to resolve these matters by this summer. Solutions cannot however, be developed without the confidence that the Congress will move forward to ratify the legislation proposed.

Projected Disposal Requirements After January 1, 1986

In 1983, generators from the five states of the central states region shipped 65,738 cubic feet of waste for disposal. Approximately ninety percent of the waste volume is generated by the utility industry. By 1986 the region will have three new operating commercial power plants. As a result of the three new plants, the region will be generating an additional 75,000 cubic feet of waste. It is estimated that by the end of 1986, the region will be generating approximately 160,000 cubic feet of waste annually.

Schedule for Developing Disposal Capacity

The goal of the Commission is to have disposal capacity available to generators of the region by 1991. Toward that end, the Commission is presently conducting a site exclusionary study. This study identifies those areas within the region that cannot be licensed as a site for low-level radioactive waste disposal. Present plans call for a second phase study that will examine those areas which have not been excluded and will also develop a management plan for the region. The second phase study is contingent upon receiving funds from the Department of Energy. If funds are not forthcoming from the Department of Energy, the progress of the Commission will be significantly curtailed. It would become necessary to secure funding from other sources, a prospect that is not very promising.

Following the conclusion of the second phase study, the Commission anticipates being prepared to request bids from potential disposal facility developers. Under the terms of the Compact, the Commission will review the bids it receives, and select an acceptable bid that is best suited to meet the needs of the region. This should occur by the end of 1986. Following the Commission's action, the burden will be on the potential developer to file a license application and proceed with site development. Assuming no major delays in the development process, it could be possible for the facility to be constructed and licensed by 1991.

This schedule assumes a number of factors favorable to site development. First, sufficient funds must be made available from the Department of Energy to conduct siting studies. Second, the Congress must consent to the Compact in 1985. Failure of the Congress to consent will prevent the Commission from taking those steps associated with selection of a potential developer and site. Third, an acceptable proposal to develop a facility must be presented to the Commission. Finally, no action must be taken which significantly curtails the licensing process.

Any deviation from these assumptions will cause a deviation in the Commission's schedule. While the Commission pledges to fulfill its responsibilities in a diligent and timely manner, we cannot make guarantees concerning matters or actions over which we have no control.

Congressional Consent to the Compacts

The Commission requests that the Congress consent to the Central Interstate Low-Level Radioactive Waste Compact. Because our region does not presently have a disposal facility that we can prevent others from using, we believe the Congress should consent to our compact without reservation. The consent of Congress to our compact is necessary if we are to go forward with our siting schedule. By consenting to the Compact, the Congress is furthering the goal of establishing the regional low-level radioactive waste management system envisioned by the Low-Level Radioactive Waste Policy Act.

With regard to other compacts presently before the Congress for consent, the Commission believes that the Congress should grant its consent to those compacts. The consent of the Congress should, however, be contingent upon the amendments to the Low-Level Radioactive Waste Policy Act previously discussed.

Impact of the Failure of the Congress to Consent to the Compacts

As stated earlier, failure of the Congress to consent to our compact will hinder our site development schedule. Failure of Congressional consent will also leave the regions in an uncertain position regarding siting efforts, disposal access guarantees, and overall waste management policy. Furthermore, the three states with existing disposal facilities would probably conclude that Congressional failure to consent to the compacts indicates an unwillingness to allow the regional waste management system to go into effect.

It is not inconceivable that under such circumstances the three sited states would take steps to close their facilities. Such actions on their part would create an atmosphere of distrust and fear that disposal capacity will not be available to generators. The result could be a solution borne out of panic and not one that is rational and would survive the test of time. We believe that a regional waste management system developed by and managed by the states is the most efficient and workable system.

Alternatives to State Responsibility

In 1979 the three states with existing disposal facilities made it clear that the present system for low-level radioactive waste disposal was not acceptable. The Congress in 1980 accepted that view when it enacted the Low-Level Radioactive Waste Policy Act. The Act established a federal policy of state responsibility in the area of low-level radioactive waste managment. The states of the Central States Compact Region did not quarrel with that federal policy, but instead worked diligently to develop the Central Interstate Low-Level Radioactive Waste Compact. The Central States have taken the responsibility established by the 1980 Act seriously.

We believe that it is premature to discuss alternatives to state responsibility and the interstate compact system as a mechanism for low-level radioactive waste management. Throughout our history, states have joined together to develop solutions to problems. Problems, large or small, are not resolved overnight. Instead lasting solutions come about only after careful consideration, deliberation, and consensus between the parties. The states have had the opportunity to discuss the great many issues which relate to low-level radioactive waste management. Perhaps it was unrealistic to assume that the states could meet their responsibilities in the area of waste management by 1986. This is not to say however, that the states cannot meet their responsibility. We believe that with the assistance of the Congress, solutions to the issues raised can be presented as legislation this year. With the issues resolved, the states can go forward with the process of meeting their responsibilities.

The states should not be penalized for failing to meet their responsibilities in a time frame that was not realistic . The Congress should allow the regional waste management system to take effect and operate as anticipated. The states should not be denied the opportunity to make the system work.

Conclusion

The Commission supports the efforts of the Chairman and the members of this Committee. Through the diligent efforts of all concerned, the remaining issues can be resolved and Congressional consent should be granted this year. We respectfully request that this Committee take a giant step toward putting the regional waste management system into effeot by granting a favorable recommendation for the consent of the Congress to the Central Interstate Low-Level Radioactive Waste Compact. We also pledge to work as diligently as possible with you and your staff to achieve consensus on any proposed amendments to the Low-Level Radioactive Waste Policy Act.

AMERICAN MEDICAL ASSOCIATION
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March 18, 1985

JAMES H. SAMMONS, M.D.
Executive Vice President
(645-4300)

The Honorable Strom Thurmond
Chairman
Committee on Judiciary
United States Senate
Washington, D.C. 20510

Re: Interstate Compacts for Disposal
of Low-Level Nuclear Waste

Dear Chairman Thurmond:

The American Medical Association takes this opportunity to submit its comments for the record of the March 8, 1985 hearing concerning legislation that would grant Congressional consent to regional compacts for the disposal of low-level radioactive waste. The establishment of these interstate compacts is pursuant to the Low-Level Radioactive Waste Policy Act (PL 96-573). PL 96-573 encourages each state to enter into an interstate compact to provide for the establishment and operation of regional disposal facilities for low-level radioactive waste. Congress must approve each such compact before it becomes effective.

The American Medical Association strongly supports the development of regional facilities for the disposal of low-level radioactive waste. The use of radioactive materials in the practice of medicine has allowed significant advancements in the diagnosis and treatment of disease. Countless lives have been saved as a result of the valuable contribution that the use of radiopharmaceuticals has made in improving the detection and treatment of disease. Radioisotopes have been especially helpful in early detection of and in the effective treatment of various forms of cancer. While radioactive waste from medical practice is usually low-level and of short half-life, the development of low-level waste disposal facilities and sites is important to protect the public health.

In light of the vital role of nuclear technology in modern medical practice and the need to promptly establish regional sites for disposal of low-level medical nuclear waste, we urge the Committee to act expeditiously in its review of legislation to approve the regional compacts. Prompt action is important, since the establishment of regional waste facilities will be delayed until the compacts are approved.

Sincerely,

James H. Sammons, M.D.

JHS/ep

ENVIRONMENTAL POLICY INSTITUTE

STATEMENT FOR THE RECORD OF DAVID BERICK
DIRECTOR, NUCLEAR WASTE AND SAFETY PROJECT
ENVIRONMENTAL POLICY INSTITUTE

BEFORE

THE SENATE COMMITTEE ON THE JUDICIARY

CONGRESSIONAL RATIFICATION OF LOW-LEVEL RADIOACTIVE WASTE INTERSTATE COMPACTS

SUBMITTED MARCH 28, 1985

Thank you for the opportunity to submit a statement for the record concerning the pending ratification of interstate compacts dealing with low-level radioactive waste management. Please consider this statement as part of the record of the Committee's March 8, 1985 hearing on this subject.

Our principal interest in these matters is in ensuring that low-level waste management practices and the next generation of low level waste disposal facilities and the management practices are safe and environmentally sound. We believe public and environmental safety should be placed first and foremost and as such we are very concerned about the events that will transpire after the interstate compacts are, or are not, ratified.

The intent behind Public Law 96-573, the Low Level Radioactive Waste Policy Act, was principally to settle a problem of equity raised by three states concerned with shouldering the nation's burden of LLW disposal. To that end, the Act established by law the Federal policy that each State be responsible for providing for the disposal of LLW generated within its borders and that LLW can be managed safely and efficiently on a regional basis. In order to provide States with the incentive to develop disposal facilities of their own, the original Act provided that regional compacts could exclude waste from non-compact states after January 1, 1986 if so ratified by Congress.

EPI has been and continues to be supportive of the goals of the original legislation. We are sympathetic to the desire of South Carolina, Washington, and Nevada citizens to relinquish their current responsibilities. The "out-of-sight, out-of-mind" attitude towards nuclear waste disposal enjoyed by so many for so many years is, rightly, no longer tenable.

However, while we recognize the concerns of citizens in the three sited states over the risks and safety of the current low-level waste disposal system, we want to make certain that haste does not become an excuse for poor siting and waste management practices in other states. The exercise of exclusionary authority on January 1, 1986, or any other date, must not precipitate crises in unsited regions or states forcing them to cut corners in getting new interim or disposal capacity into operation.

We believe that that the interests of sited states and regions lies ultimately in establishment of new regional disposal capacity. It is the development of independent out-of-region physical capacity which will relieve the burden on the three currently sited states. Failure to establish this capacity in an orderly way due to the premature shutdown of existing sites could trigger federalization of the program and the use of Federal disposal facilities in those same regions, such as use of DOE's Savannah River or Hanford or Nevada Test Site facilities, or other counterproductive consequences.

Mr. Chairman, we believe the 1980 Act is working. It is resulting in the type of national reassessment and reorganization of LLW management that it was intended to promote. The Act did not attempt to "solve" low level waste problems per se; it only intended to begin the process and it has done so.

The problem facing the Congress at this time is two fold: 1) how to address the equity concerns of states with existing sites without triggering rash or dangerous waste management and siting practices and 2) how to assure that appropriate regulatory programs are in place to provide some degree of regulatory certainty for new capacity and protection of public health, safety, and the environment during the transition period and for the next generation of low-level waste disposal facilities.

Without the establishment of new disposal capacity, existing sites will continue to be called upon to accept waste. Even the Southeast will be hard pressed to bring new disposal capacity on line by January, 1993, when the Barnwell facility is slated for closure, even if the compacts are all ratified.

Regulatory Improvements Needed to Facilitate New Capacity

In the past, the discussion of low-level waste compacts was largely focused on the interregional equity issue with regulatory and siting concerns being given short shrift. With the increasingly obvious need to extend the January 1, 1985 target date to accommodate the siting and development of new disposal capacity, the increasing interest in temporary on-site storage during the interim transition period for at least some generators, and the increasing concern over the treatment of certain types of low-level waste (Naturally Occurring and Acclerator Produced-NARM, mixed low-level and hazardous waste, above Class C wastes), the need to incorporate regulatory requirements into the low-level waste "solution" is obvious and essential to the orderly evolution of a national low-level waste system.

We believe that in order to achieve a workable national system for the management of low-level waste, which appears to us to be a fundamental condition of low-level waste compact ratification, greater attention must be paid to how low-level wastes are defined and regulated. For example, consideration should be given to the definition of low-level waste to those substances and concentrations now designated by NRC as Class A, B, and C waste. State officials have argued that those definitions should be "frozen" as currently defined in regulation. In theory, this will give state and compact officials some degree of certainty as to the types and concentrations of low-level waste, for which they will be responsible, without the threat of new responsibilities being added at a future date through unilateral action by the Nuclear Regulatory Commission.

"Freezing" the definitions may also create a new class of low-level waste which will presumably be the responsibility of the Federal Government. However, no regulatory system currently applies to this new category of "above Class C low-level waste. While it may be appropriate for the Federal Government to assume responsibility for this higher activity low-level waste, as it has for high-level waste, this should not be done in a regulatory vacuum.

If "fixing" or "freezing" the definition of low-level waste as currently defined by NRC is a prerequisite for compact ratification, as indeed it may be, Congress should extend EPA and NRC regulatory authority over Federal management of this higher activity waste in the same manner as for high-level waste. The manner in which this waste category is to be managed should be spelled out in legislation and should not be left to DOE to resolve as it chooses. These wastes, by definition, will be of very high activity and long half-lives or hazard and their safe disposal should not be left to Department of Energy(DOE) to dispose of on its various reservations.

Yet another pressing need for improved regulation is suggested by the dramatic reductions proposed by South Carolina and other current host states in volumes which may be shipped to the three existing disposal sites as a condition of ratification. Major volume reduction and interim storage mechanisms will be required to meet the proposed 40% reduction in total volume shipped for disposal. Many generators are already pursuing those options. As the Committee is no doubt aware, serious consideration is being given to achieving that reduction through a mandatory requirement for on-site storage at nuclear power stations which generate approximately 60 to 65% of waste volume. In any event, there is going to be a significant requirement for interim storage and volume reduction capability.

There are, however, currently no specific regulations in place to govern interim or short-term storage facilities. NRC has the authority to issue or amend licenses to permit on-site and off-site storage however applications are currently evaluated on a case by case basis and licensing would be carried out under Parts 30, 40, 50 and 70 of the Code of Federal Regulations depending on what materials and facilities are involved.

The duration and size of on-site storage capacity is also limited by NRC based on the scope of licensing changes sought. New licenses, for example, are required for long term storage while only a few years are allowed by license amendment. This is an appropriate procedure when such expansions are handled on a case-by-case basis, but one that is entirely inadequate when one expects a large number of generators to apply for long-term, large capacity storage expansions.

The absence of specific low-level waste storage regulations makes it more difficult to develop storage capacity as a management option than if specific regulations and procedures governing storage were promulgated. NRC's current rulemaking on facility decommissioning already raises a number of pertinent questions concerning the length of time interim or on-site storage would be appropriate and clearly presents an opportunity for NRC to begin to address the need for interim storage guidance. Congress should require promulgation of appropriate regulations.

A related but no less important, area requiring additional regulatory effort is in regard to alternatives to shallow-land burial for waste disposal. Many states have expressed an interest in developing engineered disposal facilities rather than rely on traditional land-fill style techniques. The Illinois/Kentucky compact even goes so far as to prohibit shallow land burial altogether because of past problems of off-site radionuclide migration associated with this method.

The popularity of a workshop for states sponsored by the Nuclear Regulatory Commission on May 2-3, 1984, demonstrated a clear interest in alternative disposal techniques yet, in spite of indications that they would do so early this year, the NRC has yet to promulgate Federal and Agreement State regulations and licensing guidance for these facilities. States are, understandably, reluctant to pursue alternative disposal options without the benefit of regulatory guidance. Regulatory uncertainty and questions over the licenseability of certain long term storage facilities means these facilities will, unnecesarily, take longer to license and develop than legislative timetables may allow for. But, shallow land burial facilities may be impossible to site given the overwhelming evidence of past problems and dangers associated with this type of disposal and the public's lack of confidence in that technology.

In the words of the executive summary prepared following the NRC workshop last May:

"Significant data gaps and information needs have to be addressed before timely State decision-making can be accomplished in pursuing development of a disposal technology. At a minimum, existing data should be coordinated, especially with regard to economic feasibility and actual operational experience and long-term performance of the alternative disposal technologies employed in Canada, France, and Germany. Ideally, a generic cost/risk/benefit analysis for all the alternatives would be useful and might best be performed by the Federal government on behalf of the States."

The absence of regulations clearly providing for alternatives to shallow land burial, upon which the NRC's Part 61 low-level waste disposal regulations were based is, in our opinion, adding to the delay in developing new disposal capacity in many areas of the country. EPA is currently developing regulations which will address alternatives to shallow land burial. Promulgation of these regulations and parallel activities by NRC will, in our opinion, improve the likelihood that new disposal capacity will be developed in a timely manner. EPA and NRC should be so directed by the Congress.

These examples are only the tip of the proverbial iceberg in terms of regulatory gaps that exist in the low-level waste system, as we have tried to explain. Other areas in which U.S. NRC and U.S. EPA must provide guidance are the treatment of mixed wastes, the treatment of decontamination and decommissioning wastes including solutions containing chelating compounds, and the creation of state regulatory programs where new host states chose to become Agreement States under Sec. 274 of the Atomic Energy Act.

If states are to be responsible for allocation of volume reduction or shipment limitations, such as those proposed by South Carolina and other host states, compact commissions and states may require additional regulatory authority and regulatory resources to do so. As things now stand, it does not appear that states nor compact commissions have the legal authority to enforce shipment limitations on their generators.

We understand that EPA and NRC are jointly examining the scope of the mixed waste problem and are awaiting the completion of a study by Brookhaven National Laboratory which will identify specific mixed waste streams and recommend treatment technologies. While 10 CFR Part 61 requires treatment of mixed waste at the disposal site, this requirement has little meaning unless mixed wastes can be segregated at the point of generation. EPA and NRC have informed the Committee that they have adequate authority and flexibility under current law to tailor their respective regulations to mixed waste and it is imperative that they do so upon the conclusion of the the Brookhaven study.

With regard to the Agreement State program, a number of problems have been identified with the program including the divergence between NRC and state regulatory efforts, lack of state resources, and improperly constituted state programs. While we are not suggesting that any of the next generation of facilities will be improperly regulated by states that assume this responsibility, the prospect of rapidly creating a dozen new state low-level waste regulatory programs needed to site and license new facilities, combined with the tasks of overseeing volume reduction or shipping limitations in unsited regions, raises a question as to the ability of the NRC and the states to carry out this step and the need to assure that state programs will meet minimum federal requirements.

We do not believe that the need for technical and financial and regulatory assistance required of the Federal Government to establish the new disposal and interim management capacity have been adequately recognized.

Post 1985 Access Formula

Finally, we wish to comment on the question of continued access to the three existing diposal sites. There now appears to be a consensus that no new disposal capacity can be brought on line before the January 1, 1986 cut-off date contained in the pending compacts and that some orderly transition period is required. There is no consensus, however, on the formula or process for establishing that transition period.

Obviously some kind of compromise needs to be forged that will balance competing interests. Legislation has been introduced in the House, H.R. 1083, which proposes an immediate 40% reduction in waste sent to the Barnwell and Richland, Washington low-level sites beginning December 31, 1985 over those levels shipped in 1983. The Beatty site would actually increase the amount of waste it receives under the formula. The bill does not provide an allocation system for the capacity. Governor Riley and the other two governors of host states have generally endorsed the outlines of that legislation.

In contrast to some views, we believe that the only way in which the impasse between sited and unsited regions will be resolved is by Congress setting out a specific allocation mechanism in legislation. We remain extremely skeptical of continued state-by-state or region-by-region negotiation including the process proposed in H.R. 1083. There is nothing in the H.R. 1083 negotiation approach to assure, for example, that individual states or regions do not gain a disproportionate share of "available capacity" to the detriment of other regions nor can there be any protection against such a development under any open-ended negotiation scenario.

Furthermore, unless some specific group of large generators, such as power reactors, is be isolated and statutorily "removed" from the allocation process, individual negotiations are unlikely to achieve the desired level of reduction since too many individual generators must be considered in such negotiations and states lack authority to allocate such capacity limitations.

In our testimony last year before the House Interior Committee, we proposed a phase-in of exclusionary authority for the existing sites. We continue to believe that exercise of exclusionary authority must be subject to some sort of orderly phase-in. An immediate 40% reduction, even if this reduction was assigned entirely to nuclear powerplants as some have suggested, would be impossible to achieve in a safe, orderly manner. If responsibility for this level of reduction were immediately spread across non-power plant generators the process would be even more unlikely to succeed.

It is imperative that there be an orderly phase-in of any volume reduction cap or allocation. We recommend that the legislation include a scheduled reduction, on the order of 5 to 10% a year, over a period of three or four years, until the desired "cap" or volume reduction level were reached.

While we have not been privy to the National Governors' Association ad hoc meetings on low-level waste, we are extremely interested in the proposal that utilities be required to store low-level waste on-site. Such a proposal would still require a statutorily authorized allocation mechanism for the remaining generators, but this would conceivably be easier to achieve. Other generators could be restricted to current levels and new generators going into operation during the transition could be restricted to average levels for that type of facility. Economic surcharges and disposal fees would, as shown by historical experience, reduce volumes shipped by individual generators still further.

This type of "categorical" allocation governing the amount individual generators could ship for disposal would obviate the need for individual states or commissions to allocate, or for Congress to project, specific caps on existing sites in advance since under this "reduction by category" method volume or curie reduction caps would be "assigned" to generators.

We emphasize, however, that the health and safety and environmental consequences of on-site storage by power reactors is not fully known and that the regulatory system for such storage is largely ad hoc. Before we could endorse any form of the power reactor storage proposal, we would require a more thorough analysis of the safety and environmental consequences and NRC, as we noted earlier, would have to establish specific regulations governing such storage including setting limits to its duration.

As we noted earlier, we have not been participants in the so-called NGA negotiations between sited and unsited regions, but it seems to us that before we lock ourselves into drastic volume reduction efforts, such as the 40% proposed in H.R. 1083, more serious consideration ought to be given to defining the desired reduction in risk to the citizens in the three sited states and within the low-level waste management system as a whole. Simply reducing the volume may result in higher activity waste, derived through compaction or incineration being shipped to those states. Indeed one proposal, to require utilities to store Class A waste and ship B and C waste could encourage such "conversion" of low activity waste to high activity waste. South Carolinians, for instance, may wonder at the "equity" of accepting greater quantities of higher activity wastes.

The three sited states need to reevaluate exactly what decreased level of risk they are trying to achieve, over what period of time, and to identify a realistic means of achieving that reduction. A straight volume reduction cap, such as that proposed in H.R. 1083, does not seem to us to be an effective nor workable way to achieve their goals and may significantly add to public and occupational exposures.

The three current host states ought to look at the reduction in curies of low-level waste by those three states as a way of reducing the risk to their citizens. There is an enormous variance in the hazard among the materials currently disposed of low-level waste sites. While we are all in favor of equity, all low-level waste is not created equal. We must ask ourselves, and the three sited states, if thousands of generators should employ potentially extreme measures to reduce volume when one or twc shipments of Class C, or above-Class C waste, would constitute an off-setting hazard. For example, a review should be made of the impact from implementing the cut-off of above-Class C waste proposed in H.R. 1083. Other ways in which risk could be reduced would be to analyze the impact of limiting acceptance of high activity Class B and C wastes as well as other waste streams.

Conclusion

While unsited states are aware of the duties that have befallen them, they are likely to be thwarted in their efforts to site and license new facilities and to achieve desired volume reduction levels by the absence of clear Federal regulations and standards in place to govern LLW management.

In order to provide greater certainty to generators that storage capacity will be available when needed, to allow states to develop storage capacity in an expeditious manner and, to provide greater assurance to the public that storage facilities will be developed with the utmost regard for public and environmental health and safety, Congress should direct the NRC and EPA to promulgate clear and specific regulations, guidance and technical analyses to govern low-level waste facilities.

Strict federal oversight, regulations, and procedures in place to govern and direct the siting, licensing and operations of all new facilities will go a long way towards improving public confidence in the safety of waste management and disposal techniques. Public acceptance of the risks involved in LLW management is a critical factor if states are expected to take on their new responsibilities in a timely manner.

Thank you, this concludes our statement for the record. We will be pleased to respond to any questions the Committee may wish to address to us regarding this statement.

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